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AREAS OF STUDY

• Arts, Humanities, Communications and Design
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• Construction, Industry, Manufacturing and Transportation
• Continuing and Professional Development
• Education
• Health Sciences
• Public Safety and Human/Consumer Services
• Science, Technology, Engineering and Math (STEM)
• Social and Behavioral Science
ARTS, HUMANITIES, COMMUNICATIONS AND DESIGN

- Art and Design, Associate of Applied Science Degree
- Art and Design, Certificate of Technology
- Art and Design, Occupational Certificate
- Art, Commercial Art
- Communications, Associate of Arts
- Fine Arts, Associate of Arts
- Interior Design, Associate of Applied Science
- Interior Design, Pre-Professional Level 2 Certificate
- Music Recording, Associate of Applied Science
- Music, Associate of Arts in Music
- Music, Audio Engineering
- Music, Broadcast Audio Technology, Certificate of Technology
- Music, Sound Recording, Occupational Certificate
- Music, Techniques of Audio Engineering, Certificate of Technology

Program Information

Are you a born creator? When you think, are your thoughts full of shape, color and images? If so, an art degree at San Jacinto College may be your future. Studying art will help you kick-start a career in the creative world. Here you will experience our award-winning instructors and modern facilities like our visual studios, outfitted with a state-of-the-art computer labs. From painting, sculpture and drawing to high-tech graphic design, illustration and animation, San Jacinto encourages you to express your creativity in ways you’ve only imagined!

The San Jacinto College art and design Associate of Applied Science (A.A.S.) program:
- Is designed to provide basic preparation for entry-level employment in visual advertising /graphic/media communication.
- Develops skills in both print and digital media, giving students a chance to decide, through electives, if they would prefer to work in graphic design for printing or for digital end use.
- Gives the student hands-on experience in building a well-rounded and professional portfolio of work.

Career Opportunities

The San Jacinto College art and design A.A.S. program opens students to pursue careers as:
- Art director
- Layout artist
- Brand identity designer
- Digital imaging artist
- Logo designer
- Illustrator
- Multimedia designer
- Prepress technician
- Web designer
- Animator (2D or 3D)

Earning Potential

Graphic Designer median salary: $46,851 per year¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-929-4643 or Jeffrey.McGee@sjcd.edu

Campus

South Campus

The Art and Design technical curriculum is designed to provide basic preparation for entry-level employment within the greater design industry. The program will develop basic skills across a variety of design concepts and applications, including design communications, digital media, web design, photography and video.

Associate of Applied Science Degree

The associate of applied science degree is for students who want to earn a two-year degree while preparing for jobs in the design industry. Building off the certificate of technology, students will complete additional
San Jacinto College

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courses in drawing, design and art history to further strengthen their skillset.

**Plan of Study**

**South Campus**

3ART-DSN

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<td>or ARTC 2366</td>
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*College Preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate of applied science degree. Technical courses do not transfer to a senior institution. See an Art and Design Department Counselor for information.*

**Capstone Experience:** ARTC 2335 Portfolio Development for Graphic Design or ARTC 2366 Field Experience-Graphic Design, Commercial Art and Illustration

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**Art and Design, Certificate of Technology**

**Program Information**

Are you a born creator? When you think, are your thoughts full of shape, color and images? If so, an art degree at San Jacinto College may be your future. Studying art will help you kick-start a career in the creative world. Here you will experience our award-winning instructors and modern facilities like our visual studios, outfitted with a state-of-the-art computer labs. From painting, sculpture and drawing to high-tech graphic design, illustration and animation, San Jacinto encourages you to express your creativity in ways you’ve only imagined!

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**Career Opportunities**

The San Jacinto College art and design A.A.S. program opens students to pursue careers as:

- Art director
- Layout artist
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- Logo designer
- Illustrator
- Multimedia designer
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• Animator (2D or 3D)

Earning Potential
Graphic Designer median salary: $46,851 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-929-4643 or Jeffrey.McGee@sjcd.edu

Campus
South Campus

The Art and Design technical curriculum is designed to provide basic preparation for entry-level employment within the greater design industry. The program will develop basic skills across a variety of design concepts and applications, including design communications, digital media, web design, photography and video.

Certificate of Technology
This certificate of technology is designed to meet the needs of students who desire to enter the design workforce with a more developed skillset. Building off the occupational certificate, students will complete additional courses in design communications, animation and portfolio development. All courses required for the certificate of technology may be used in completing the Art and Design Associate of Applied Science degree.

Plan of Study
South Campus
4ART-DSN

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Capstone Experience: ARTC 2335 Portfolio Development for Graphic Design or ARTC 2366 Field Experience-Graphic Design, Commercial Art and Illustration

Art and Design, Occupational Certificate

Program Information
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• Illustrator
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Earning Potential
Graphic Designer median salary: $46,851 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-929-4643 or Jeffrey.McGee@sjcd.edu

Campus
South Campus

The Art and Design technical curriculum is designed to provide basic preparation for entry-level employment within the greater design industry. The program will develop basic skills across a variety of design concepts and applications, including design communications, digital media, web design, photography and video.

Occupational Certificate
This occupational certificate is designed to enable students to quickly build a broad foundation of design techniques and applications. All courses required for the Art and Design Occupational Certificate may be used in completing the Art and Design Certificate of Technology and the Art and Design Associate of Applied Science degree.

Plan of Study
South Campus
6ART-DSN

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Capstone Experience: ARTC 1327 Typography

Art, Commercial Art

See Art and Design

Communications, Associate of Arts

Write Your Future
Most people are concerned with information, and they want only the latest. They may get their information from various sources such as newspapers, websites, television, radio, social networking sites and RSS feeds, but one thing is constant – it takes well-trained media professionals to deliver content.

Your Future Starts Here
Your career as a media professional can start at San Jacinto College. Here you will learn the foundation of how communication industries operate and the principles of media content generation. Our associate degree program also gives you the opportunity to work on the College's student publication, the San Jacinto Times. From here you can go on to a four-year university, well-prepared for further study in journalism, broadcasting, public relations, advertising or photography.

Transfer Information
San Jacinto College offers many courses in the transfer path that meet the requirements of a major at four-year and upper-level colleges and universities baccalaureate degree programs. Students may prepare to transfer to a particular program at an upper-level institution by either...
Completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate or selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with the upper-level institution of the student’s choosing.

Career Opportunities
A degree in Communications from San Jacinto College helps students begin careers in fields such as:

- Local reporter
- Assistant news producer
- Public relations specialist
- Advertising sales/account manager
- Creative artist/designer – advertising
- Copy editor
- Social media manager
- Production assistant/manager – television or film

Earning Potential
- Public relations specialist - $66,759*
- Reporter/Correspondent - $47,035*
- Media and communication - $45,961*
- Advertising Sales Agent - $57,976*
- Proofreaders - $40,375*
- News producer/director - $69,995*

*Source: www.TexasWages.com, gulf coast region, 2017

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major. Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

All Campuses
1COMM

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<td>PHYS</td>
<td>University Physics II</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL</td>
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</tr>
<tr>
<td>ENGL</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL</td>
<td>Technical and Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Mathematics for Business and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Calculus for Business and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Elementary Statistical Methods (Statistics)</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Pre-Calculus Math</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH</td>
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<td>3</td>
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<tr>
<td>PHYS</td>
<td>College Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS</td>
<td>College Physics II</td>
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<tr>
<td>PHYS</td>
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<td>3</td>
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<tr>
<td>PHYS</td>
<td>University Physics II</td>
<td>3</td>
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</tbody>
</table>
### Language, Philosophy, and Culture (Humanities)

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 2322</td>
<td>British Literature I</td>
</tr>
<tr>
<td>ENGL 2323</td>
<td>British Literature II</td>
</tr>
<tr>
<td>ENGL 2327</td>
<td>American Literature I</td>
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<tr>
<td>ENGL 2328</td>
<td>American Literature II</td>
</tr>
<tr>
<td>ENGL 2332</td>
<td>World Literature I</td>
</tr>
<tr>
<td>ENGL 2333</td>
<td>World Literature II</td>
</tr>
<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
</tr>
<tr>
<td>ENGL 2351</td>
<td>Mexican American Literature</td>
</tr>
<tr>
<td>GEOG 1302</td>
<td>Human Geography</td>
</tr>
<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
</tr>
<tr>
<td>HIST 2322</td>
<td>World Civilization II</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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### Creative Arts (Fine Arts)

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
</tr>
<tr>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
</tr>
<tr>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
</tr>
<tr>
<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>MUSI 1307</td>
<td>Music Literature</td>
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<td>MUSI 1310</td>
<td>American Music</td>
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### American History

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 1301</td>
<td>United States History I</td>
</tr>
<tr>
<td>HIST 1302</td>
<td>United States History II</td>
</tr>
<tr>
<td>HIST 2301</td>
<td>Texas History</td>
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<tr>
<td>HIST 2327</td>
<td>Mexican American History I</td>
</tr>
<tr>
<td>HIST 2328</td>
<td>Mexican American History II</td>
</tr>
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### Government/Political Science

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution and Topics)</td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government (Texas Constitution and Topics)</td>
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### Social and Behavioral Sciences

Select one of the following: 3

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ANTH 2302</td>
<td>Introduction to Archaeology</td>
</tr>
<tr>
<td>ANTH 2346</td>
<td>General Anthropology</td>
</tr>
<tr>
<td>ANTH 2351</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>GEOG 1303</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>GOVT 2304</td>
<td>Introduction to Political Science</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HIST 2312</td>
<td>Western Civilization II</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
</tr>
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</table>

### Component Area Option

Select two of the following: 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
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<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
</tr>
<tr>
<td>PHED 1164</td>
<td>Introduction to Physical Fitness and Wellness</td>
</tr>
<tr>
<td>CHIN 1411</td>
<td>Beginning Chinese I</td>
</tr>
<tr>
<td>CHIN 1412</td>
<td>Beginning Chinese II</td>
</tr>
<tr>
<td>FREN 1411</td>
<td>Beginning French I</td>
</tr>
<tr>
<td>FREN 1412</td>
<td>Beginning French II</td>
</tr>
<tr>
<td>GERM 1411</td>
<td>Beginning German I</td>
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<tr>
<td>GERM 1412</td>
<td>Beginning German II</td>
</tr>
<tr>
<td>SGNL 1401</td>
<td>Beginning American Sign Language I</td>
</tr>
<tr>
<td>SGNL 1402</td>
<td>Beginning American Sign Language II</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish I</td>
</tr>
<tr>
<td>SPAN 1412</td>
<td>Beginning Spanish II</td>
</tr>
</tbody>
</table>

| Total Credits | 48 |

---

1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. MATH 1342 is required for a bachelor's degree in nursing.

4. BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.

5. BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.

6. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

7. 2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.
Fine Arts, Associate of Arts

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major. Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

All Campuses

FINEARTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ARTS, DANC, DRAM, MUAP, MUEN or MUSI</td>
<td>Transfer Path: 12 Semester Credit Hours in any combination of:</td>
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<tr>
<td>EDUC 1300</td>
<td>Learning Framework</td>
<td>3</td>
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<tr>
<td>PSYC 1300</td>
<td>Learning Framework</td>
<td>3</td>
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Academic elective (if successfully completed GUST 0305)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
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</table>

Academic elective (if student passes the computer literacy exam)

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I (required)</td>
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<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
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</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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Mathematics

Select one of the following:

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<td>MATH 1316</td>
<td>Plane Trigonometry</td>
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</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences</td>
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<tr>
<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences</td>
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</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td></td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods (Statistics)</td>
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<tr>
<td>MATH 2318</td>
<td>Linear Algebra</td>
<td></td>
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<tr>
<td>MATH 2320</td>
<td>Differential Equations</td>
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<tr>
<td>MATH 2412</td>
<td>Pre-Calculus Math</td>
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<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
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<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
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Life and Physical Sciences (Natural Science)

Select two of the following:

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<th>Title</th>
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<tbody>
<tr>
<td>ASTR 1303</td>
<td>Stars and Galaxies (lecture)</td>
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<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
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<td>BIOL 1306</td>
<td>Biology for Science Majors I (Lecture)</td>
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<td>BIOL 1307</td>
<td>Biology for Science Majors II (Lecture)</td>
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<tr>
<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (Lecture)</td>
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<tr>
<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (Lecture)</td>
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<td>BIOL 1311</td>
<td>General Botany</td>
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<tr>
<td>BIOL 1313</td>
<td>General Zoology (Lecture)</td>
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<tr>
<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<tr>
<td>CHEM 1305</td>
<td>Introductory Chemistry I (lecture)</td>
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<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
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<tr>
<td>GEOL 1301</td>
<td>Earth Sciences for Non-Science Majors I (lecture)</td>
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<td>GEOL 1303</td>
<td>Physical Geology (lecture)</td>
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<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
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<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
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<td>PHYS 1301</td>
<td>College Physics I (lecture)</td>
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<td>PHYS 1302</td>
<td>College Physics II (lecture)</td>
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<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
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<tr>
<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
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Language, Philosophy, and Culture (Humanities)

Select two of the following:

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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 2322</td>
<td>British Literature I</td>
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<td>ENGL 2323</td>
<td>British Literature II</td>
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<td>American Literature I</td>
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<td>World Literature I</td>
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<tr>
<td>ENGL 2333</td>
<td>World Literature II</td>
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<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
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<td>ENGL 2351</td>
<td>Mexican American Literature</td>
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</tr>
<tr>
<td>GEOG 1302</td>
<td>Human Geography</td>
<td></td>
</tr>
<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
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</tr>
<tr>
<td>HIST 2322</td>
<td>World Civilization II</td>
<td></td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
<td></td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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</tbody>
</table>
Creative Arts (Fine Arts)
Select one of the following:  
- ARTS 1301 Art Appreciation
- ARTS 1303 Art History I (Prehistoric to the 14th century)
- ARTS 1304 Art History II (14th century to the present)
- DANC 2303 Dance Appreciation
- DRAM 1310 Introduction to Theatre
- DRAM 2366 Introduction to Cinema: Film Appreciation I
- MUSI 1306 Music Appreciation
- MUSI 1307 Music Literature
- MUSI 1310 American Music

American History
Select two of the following:  
- HIST 1301 United States History I
- HIST 1302 United States History II
- HIST 2301 Texas History
- HIST 2327 Mexican American History I
- HIST 2328 Mexican American History II

Government/Political Science
Select two of the following:  
- GOVT 2305 Federal Government (Federal Constitution and Topics)  
- GOVT 2306 Texas Government (Texas Constitution and Topics)

Social and Behavioral Sciences
Select one of the following:  
- ANTH 2302 Introduction to Archaeology
- ANTH 2346 General Anthropology
- ANTH 2351 Cultural Anthropology
- ECON 2301 Principles of Macroeconomics
- ECON 2302 Principles of Microeconomics
- GEOG 1303 World Regional Geography
- GOVT 2304 Introduction to Political Science
- HIST 2311 Western Civilization I
- HIST 2312 Western Civilization II
- PSYC 2301 General Psychology
- SOCI 1301 Introduction to Sociology
- SOCI 2319 Minority Studies I

Component Area Option
Select two of the following:  
- SPCH 1311 Introduction to Speech Communication
- SPCH 1315 Public Speaking
- SPCH 1318 Interpersonal Communications
- SPCH 1321 Business and Professional Speech
- PHED 1164 Introduction to Physical Fitness and Wellness
- CHIN 1411 Beginning Chinese I
- CHIN 1412 Beginning Chinese II
- FREN 1411 Beginning French I
- FREN 1412 Beginning French II
- GERM 1411 Beginning German I
- GERM 1412 Beginning German II
- SGNL 1401 Beginning American Sign Language I

Total Credits 48

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Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

Interior Design, Associate of Applied Science
Program Information

Do you have an eye for design, does an empty room set your imagination on fire, if so, an Interior Design degree from San Jacinto College may be just the thing to kick-start your career. Homeowners, architects and businesses are putting more emphasis on quality interior design than ever before. Our program will prepare you for the creative, technical and business sides of the interior design business. As a student pursuing an interior design degree, you will plan and design residential and commercial interiors, explore and research problem-solving techniques, create and give presentations and learn how to run a successful interior design business.

The San Jacinto College interior design program:

• Is designed to develop the ability to identify, research, and creatively solve problems relative to interior spaces, including programming, design analysis and space planning.
• Offers hands-on training with commercial and residential interiors by preparing presentations, and learning business procedures used by interior designers.
• Includes five terms of study in interior design and related courses. Upon completion of the required 60 (effective fall 2014) term hours, the student may file for an associate of applied science degree.

Additional Information

Students may continue their study to complete the twelve term hours in the third year of the program and receive the Enhanced Skills Certificate in interior design. See the San Jacinto College catalog for additional certificates and details.

Career Opportunities

Through the year 2014, the Gulf Coast Region is forecasted to generate a total of 296 new interior design jobs.

Students graduating with a degree in interior design pursue careers as:

• Hairdressers
• Color Specialists
• Manicurists
• Make-Up Artists
• Ceramic tile, accessory, furniture, or textile designers
• AutoCAD draftsperson
• Freelance writer for interior design publications/ newspapers
• Product researcher
• Facilities manager
• In-house designer for government agencies, hospitals, and colleges
• Residential or Commercial designer
• Manufacturers representative
• Retail buyer for design related products
• Showroom representative

Earning Potential

Interior Designer Median Salary: $50,599

1 Source: www.texaswages.com (http://www.texaswages.com), 2017

For more information contact one of the following:

281-998-6150 x 1473 or email David.Vanover@sjcd.edu

281-991-2608 or email Kay.Richardson@sjcd.edu

Campus

Central Campus

This program is designed to develop the ability to identify, research and creatively solve problems relative to interior spaces, including programming, design analysis and space planning. The students will work with commercial and residential spaces, prepare presentations, and learn business procedures used by interior designers.

The course work for the associate of applied science degree is offered over a five semester period, which includes one summer term. The curriculum provides a balance of technical, creative and business training necessary for a career in interior design.

Note: Students who begin their interior design education after Sept 1, 2006 will not be allowed by the Texas Board of Architectural Examiners (TBAE) to register with the State of Texas to become a Registered Interior Designer unless they graduate from a four-year program that is approved by the Council for Interior Design Accreditation (CIDA). Please keep in mind that registration in the state of Texas is completely voluntary and that you can practice interior design without being registered with TBAE. However, a student graduating from a two-year institution can apply for certification by NCIDQ (National Council for Interior Design Qualifications) to be NCIDQ certified with a two-year degree and 5280 hours of qualified interior design coursework. Please see NCIDQ’s website for details www.ncidq.org (http://www.ncidq.org).

Plan of Study

Central Campus

3INT-DSGN

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Term</td>
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<td>INDS 1319</td>
<td>Technical Drawing for Interior Designers</td>
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<td>INDS 1351</td>
<td>History of Interiors I</td>
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<td>INDS 2307</td>
<td>Textiles for Interior Design</td>
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<td>Materials, Methods and Estimating</td>
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<td>INDS 1349</td>
<td>Fundamentals of Space Planning</td>
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<td>INDS 1345</td>
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INDS 2313  Residential Design I  3
INDS 2321  Presentation Drawing  3
Social and Behavioral Sciences  3

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<td>IND 2325</td>
<td>Professional Practices for Interior Design</td>
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<td>IND 2335</td>
<td>Residential Design II</td>
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<td>IND 2386</td>
<td>Internship-Interior Design</td>
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Capstone Experience: IND 2386 Internship-Interior Design

Courses which satisfy this requirement are listed in the Social and Behavioral Sciences sections of the Transfer Core Curriculum.

**Interior Design, Pre-Professional Level 2 Certificate**

**Program Information**

Do you have an eye for design, does an empty room set your imagination on fire, if so, an Interior Design degree from San Jacinto College may be just the thing to kick-start your career. Homeowners, architects and businesses are putting more emphasis on quality interior design than ever before. Our program will prepare you for the creative, technical and business sides of the interior design business. As a student pursuing an interior design degree, you will plan and design residential and commercial interiors, explore and research problem-solving techniques, create and give presentations and learn how to run a successful interior design business.

The San Jacinto College interior design program:

- Offers hands-on training with commercial and residential interiors by preparing presentations, and learning business procedures used by interior designers.
- Includes five terms of study in interior design and related courses. Upon completion of the required 60 (effective fall 2014) term hours, the student may file for an associate of applied science degree.

**Additional Information**

Students may continue their study to complete the twelve term hours in the third year of the program and receive the Enhanced Skills Certificate in interior design. See the San Jacinto College catalog for additional certificates and details.

**Career Opportunities**

Through the year 2014, the Gulf Coast Region is forecasted to generate a total of 296 new interior design jobs.

Students graduating with a degree in interior design pursue careers as:

- Hairdressers
- Color Specialists
- Manicurists
- Make-Up Artists
- Ceramic tile, accessory, furniture, or textile designers
- AutoCAD draftsperson
- Freelance writer for interior design publications/newspapers
- Product researcher
- Facilities manager
- In-house designer for government agencies, hospitals, and colleges
- Residential or Commercial designer
- Manufacturers representative
- Retail buyer for design related products
- Showroom representative

**Earning Potential**

Interior Designer Median Salary: $50,599

Source: www.texaswages.com (http://www.texaswages.com), 2017

For more information contact one of the following:

281-998-6150 x 1473 or email David.Vanover@sjcd.edu
281-991-2608 or email Kay.Richardson@sjcd.edu

**Campus**

Central Campus

**Plan of Study**

Central Campus
5INTD-DSGN

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>IND 1311</td>
<td>Fundamental of Interior Design</td>
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</tr>
<tr>
<td>IND 1319</td>
<td>Technical Drawing for Interior Designers</td>
<td>3</td>
</tr>
</tbody>
</table>
Music Recording, Associate of Applied Science

Program Information

If you have an ear for perfection, San Jacinto College can help you get started down the road to a career as a recording or sound reinforcement engineer. Musicians, singers, actors, announcers and public speakers spend their entire careers trying to sound their best and audio engineers are their most important allies in accomplishing this goal. San Jacinto College gives you hands-on training in recording, mixing and special effects processing, along with a curriculum of music instruction. Master your skills here and you’ll go far!

The San Jacinto College audio engineering curriculum:

- Is designed for students seeking careers as sound recording or sound reinforcement engineers.
- Emphasizes the theory and hands-on application of recording, mixing and effects-processing equipment.
- Requires musical proficiency and an understanding of business and music business systems.

Capstone Experience: INDs 2313 Residential Design I

Additional Information

San Jacinto College and Alvin Community College offer a joint Certificate of Technology in Broadcast Audio Technology.

- Recording studios
- Television and radio stations
- Convention centers
- Hotels
- Churches

Earning Potential

Broadcast Technician Median Salary: $36,990

Sound Engineering Technician Median Salary: $39,120

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-576-1832.

Campuses

Central Campus
North Campus

Information

The audio engineering curriculum is designed for students seeking careers as sound recording or sound reinforcement engineers. Employment opportunities exist in recording studios, television and radio stations, convention centers, hotels, churches and other private entities. The training places a heavy emphasis on the theory and hands-on application of recording, mixing and effects-processing equipment. Also required are musical proficiency and an understanding of business and music business systems.

Plan of Study

Central Campus
3MUS-RCRD

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<th>Title</th>
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<td>Guitar Class</td>
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<td>MUSC 1327</td>
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Second Term

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<tbody>
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<td>ENGL 2311</td>
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<td>or ENGL 1302</td>
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<tr>
<td>MUSC 1331</td>
<td>Musical Instrument Digital Interface</td>
<td>3</td>
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</table>
Music, Associate of Arts in Music

Follow Your Calling

Have you always had a song in your heart? San Jacinto College is an outstanding place to begin your musical journey and a rewarding career. Our program pairs general academic instruction with a wide array of music courses, including theory, composition, voice and ear training, and immersion in specific instruments and musical genres. A music degree will prepare you for study in a baccalaureate-level music program – including a bachelor of music education.

The San Jacinto College music program:

- provides a balanced blend of courses including theory, composition, vocal training, and instrument specific immersion.
- offers spacious studios and a state-of-the-art theater to support a vibrant environment conducive to collaborative endeavors among faculty and students who share a passion for music.
- is dedicated to helping students experience technical mastery, develop critical and creative thinking skills.

Career Opportunities

Graduates of this program have become professional:

- Performers
- Teachers
- Music therapists
- Researchers
- Writers

Earning Potential

- Music educator (middle school) - $61,954*
- Music educator (secondary) - $61,844*
- Music educator (post-secondary) - $72,114*
- Music directors and composers - $55,221*

*Source: www.texaswages.com, Gulf Coast Region, 2017

Visit the Music and Audio Engineering Website

Location

Central, North

The Texas Higher Education Coordinating Board allows a community college to combine a Field of Study (FOS) and a portion of the core curriculum, including government and history, to create a 60 SCH degree.
The Associate of Arts in Music is a combination of the Music FOS and the College core curriculum.

It has been designed to apply to Bachelor of Music (B.M.), Bachelor of Arts (B.A.), Bachelor of Music Education (B.M.Ed.) or other baccalaureate-level music degrees as deemed appropriate by the awarding institution.

All Campuses
1MUSIC

Courses in the field of study for music include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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</tr>
<tr>
<td>MUSI 1211</td>
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<td>MUSI 1216</td>
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<tr>
<td><strong>Second Term</strong></td>
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</tr>
<tr>
<td>MUSI 1212</td>
<td>Theory of Music II</td>
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<tr>
<td>MUSI 1217</td>
<td>Ear Training and Sight Singing II</td>
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<tr>
<td>MUEN Ensemble</td>
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<td>1</td>
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<tr>
<td>MUAP Major instrument</td>
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<tr>
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<td>CORE Curriculum (060)</td>
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<tr>
<td>MUSI 2211</td>
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¹ If music fundamental class is required, Theory I and ET/SS I may be taken in the spring semester with Theory II and ET/SS II taken in the summer term. Fundamentals may also be taken in the summer term before the first fall term.

² Private piano lessons may be taken by those with a substantial piano background, class piano not required for piano majors. Class piano prepares Music Majors for the Piano Proficiency exams they will face upon transfer because keyboard (piano) competency is a requirement for most baccalaureate degrees.

Music, Audio Engineering

If you have an ear for perfection, San Jacinto College can help you get started down the road to a career as a recording or sound reinforcement engineer. Musicians, singers, actors, announcers and public speakers spend their entire careers trying to sound their best and audio engineers are their most important allies in accomplishing this goal. San Jacinto College gives you hands-on training in recording, mixing and special effects processing, along with a curriculum of music instruction. Master your skills here and you'll go far!

The San Jacinto College audio engineering curriculum:

- Is designed for students seeking careers as sound recording or sound reinforcement engineers.
- Emphasizes the theory and hands-on application of recording, mixing and effects-processing equipment.
- Requires musical proficiency and an understanding of business and music business systems.

San Jacinto College 2018-2019
Additional Information
San Jacinto College and Alvin Community College offer a joint Certificate of Technology in Broadcast Audio Technology.

- Recording studios
- Television and radio stations
- Convention centers
- Hotels
- Churches

Earning Potential
Broadcast Technician Median Salary: $36,990
Sound Engineering Technician Median Salary: $39,120

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-576-1832.

Campuses
Central Campus
North Campus

Information
The audio engineering curriculum is designed for students seeking careers as sound recording or sound reinforcement engineers. Employment opportunities exist in recording studios, television and radio stations, convention centers, hotels, churches and other private entities. The training places a heavy emphasis on the theory and hands-on application of recording, mixing and effects-processing equipment. Also required are musical proficiency and an understanding of business and music business systems.

Certificate of Technology
In a unique cooperative effort, San Jacinto College District (SJC) and Alvin Community College (ACC) are offering a joint Certificate of Technology in broadcast audio technology.

Plan of Study
Central Campus
4MUS-BRCST

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<td>RTVB 1355</td>
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Credits 12

| Second Term | MUSC 2427 Audio Engineering II       | 4       |
|           | MUSC 1323 Audio Electronics Troubleshooting | 3     |
|           | RTVB 1317                             | 3       |
|           | RTVB 2380                             | 3       |

Credits 14

Total Credits 40

Capstone Experience: MUSC 2386 Internship-Recording Arts Technology/Technician, RTVB 1391

Note: The RTVB rubric applies for the Alvin Community College courses.

Music, Sound Recording, Occupational Certificate

Program Information
If you have an ear for perfection, San Jacinto College can help you get started down the road to a career as a recording or sound reinforcement engineer. Musicians, singers, actors, announcers and public speakers spend their entire careers trying to sound their best and audio engineers are their most important allies in accomplishing this goal. San Jacinto College gives you hands-on training in recording, mixing and special effects processing, along with a curriculum of music instruction. Master your skills here and you'll go far!

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- Is designed for students seeking careers as sound recording or sound reinforcement engineers.
- Emphasizes the theory and hands-on application of recording, mixing and effects-processing equipment.
- Requires musical proficiency and an understanding of business and music business systems.

Additional Information
San Jacinto College and Alvin Community College offer a joint Certificate of Technology in Broadcast Audio Technology.

- Recording studios
- Television and radio stations
- Convention centers
Music, Techniques of Audio Engineering, Certificate of Technology

- Hotels
- Churches

Earning Potential
Broadcast Technician Median Salary: $36,990

Sound Engineering Technician Median Salary: $39,120

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-576-1832.

Campuses
Central Campus
North Campus

Information
The audio engineering curriculum is designed for students seeking careers as sound recording or sound reinforcement engineers. Employment opportunities exist in recording studios, television and radio stations, convention centers, hotels, churches and other private entities. The training places a heavy emphasis on the theory and hands-on application of recording, mixing and effects-processing equipment. Also required are musical proficiency and an understanding of business and music business systems.

Plan of Study
Central Campus
6MUS-SOUND

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<td>MUSC 1323</td>
<td>Audio Electronics Troubleshooting</td>
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<td>MUSC 1327</td>
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<td>and MUSC 1331</td>
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<td>MUSC 2427</td>
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<tr>
<td>or MUSC 2403</td>
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Capstone Experience: MUSC 2101 Audio Engineering Practices

Verification of workplace competencies.

¹ MUSC 1327 Audio Engineering I and MUSC 2427 Audio Engineering II may not be taken concurrently.

Program Information
If you have an ear for perfection, San Jacinto College can help you get started down the road to a career as a recording or sound reinforcement engineer. Musicians, singers, actors, announcers and public speakers spend their entire careers trying to sound their best and audio engineers are their most important allies in accomplishing this goal. San Jacinto College gives you hands-on training in recording, mixing and special effects processing, along with a curriculum of music instruction. Master your skills here and you’ll go far!

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- Requires musical proficiency and an understanding of business and music business systems.

Additional Information
San Jacinto College and Alvin Community College offer a joint Certificate of Technology in Broadcast Audio Technology.

- Recording studios
- Television and radio stations
- Convention centers
- Hotels
- Churches

Earning Potential
Broadcast Technician Median Salary: $36,990

Sound Engineering Technician Median Salary: $39,120

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-576-1832.

Campuses
Central Campus
North Campus

San Jacinto College 2018-2019
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Plan of Study
Central Campus
4MUS-AUDI

<table>
<thead>
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Capstone Experience: MUSC 2386 Internship-Recording Arts Technology/Technician

Verification of workplace competencies.
BUSINESS

- Accounting, Associate of Applied Science
- Accounting, Level 2 Certificate
- Business Management - Entrepreneur, Associate of Applied Science
- Business Management - Entrepreneur, Certificate of Technology
- Business Management - Entrepreneurship, Level 2 Certificate
- Business Management - Retail Management, Certificate of Technology
- Business Management, Associate of Applied Science
- Business Management, Level 2 Certificate
- Business Management, Occupational Certificate
- Business Marketing Foundations of Marketing Specialty, Occupational Certificate
- Business, Administrative Assistant, Certificate of Technology
- Business, Associate of Arts
- Business, Executive Administrative Assistant, Associate of Applied Science
- Business, Executive Administrative Assistant, Level 2 Certificate
- Business, Management Specialty, Certificate of Technology
- Business, Medical Office Support, Enhanced Skills Certificate
- Business, Office Assistant, Occupational Certificate
- Global Logistics and Supply Chain Management, Associate of Applied Science
- Global Logistics and Supply Chain Management, Certificate of Technology
- Long Term Care Administration, Advanced Technical Certificate
- Paralegal, Associate of Applied Science
- Real Estate Advanced, Level 2 Certificate
- Real Estate, Associate of Applied Science
- Real Estate, Certificate of Technology
- Real Estate, Occupational Certificate

Accounting, Associate of Applied Science

Program Information
Accounting has become one of the most prominent themes in business. Changing regulations, compliance initiatives and increasing corporate complexity have brought accounting professionals to the forefront of business and government. Our graduates have gone on to start successful bookkeeping and income tax businesses. You can also use this degree to kick-start your interest in pursuing accounting at a four-year university.

The San Jacinto College accounting program:
- Prepares students to work in accounts payable, accounts receivable, payroll and banking in any number of companies and organizations
- Opens students to careers in non-business fields such as government officials and the legal profession

*Please note, however, that the A.A.S. degree is not designed to completely transfer to a four-year university. For more information, please consult an educational planner/counselor or department chair.

Career Opportunities
Upon completion of this degree, students should be able to find entry-level employment in:
- Accounts payable
- Accounts receivable
- Payroll
- Banking
- Bookkeeping
- Income Tax Accounting

Earning Potential
Bookkeeping, Accounting, and Auditing Clerk median salary: $40,746 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact Central Campus at 281-998-6150 ext. 1841; North Campus at 281-998-6150 ext. 7347.

Campuses
Central Campus
North Campus
Information

The two-year technical accounting program is for individuals preparing for immediate entry into the accounting field. Students pursuing a bachelor’s degree in accounting should refer to the information about the associate of arts degree in the Transfer Program section of the catalog and see a counselor prior to registration.

Plan of Study

Central and North Campuses

3ACNT

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<td>Business Principles</td>
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<td>ACNT 1313</td>
<td>Computerized Accounting Applications</td>
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<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
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Verification of workplace competencies

**Capstone Experience:** ACNT 2302 Accounting Capstone

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

2 Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.

Accounting, Level 2 Certificate

Program Information

Accounting has become one of the most prominent themes in business. Changing regulations, compliance initiatives and increasing corporate complexity have brought accounting professionals to the forefront of business and government. Our graduates have gone on to start successful bookkeeping and income tax businesses. You can also use this degree to kick-start your interest in pursuing accounting at a four-year university.

The San Jacinto College accounting program:

• Prepares students to work in accounts payable, accounts receivable, payroll and banking in any number of companies and organizations
• Opens students to careers in non-business fields such as government officials and the legal profession

*Please note, however, that the A.A.S. degree is not designed to completely transfer to a four-year university. For more information, please consult an educational planner/counselor or department chair.

Career Opportunities

Upon completion of this degree, students should be able to find entry-level employment in:

• Accounts payable
• Accounts receivable
• Payroll
• Banking
• Bookkeeping
• Income Tax Accounting

Earning Potential

Bookkeeping, Accounting, and Auditing Clerk median salary: $40,746 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact Central Campus at 281-998-6150 ext. 1841; North Campus at 281-998-6150 ext. 7347.

Campuses

Central Campus
North Campus
Information

The two-year technical accounting program is for individuals preparing for immediate entry into the accounting field. Students pursuing a bachelor’s degree in accounting should refer to the information about the associate of arts degree in the Transfer Program section of the catalog and see a counselor prior to registration.

Level 2 Certificate

The Accounting Level 2 Certificate provides specialized accounting courses to prepare students for entry into an accounting career.

All of the courses required for this Accounting Level 2 Certificate also apply toward the Associate of Applied Science Degree in Accounting.

Plan of Study

Central and North Campuses

SACNT

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<tr>
<th>Course</th>
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Capstone Experience: ACNT 2366 Practicum (or Field Experience) - Accounting

Program Information

Shifting economic conditions, breakthrough technologies, and a highly opportunistic business environment have led to a vast resurgence of the startup business. Entrepreneurs abound, and those with the most well-rounded business management skills are best poised for success. At San Jacinto College, you will learn principles vital to the formation, organization, leadership, and control of your own business, such as market analysis, problem solving, planning, staffing, purchasing, marketing, communication, and workforce management. At San Jacinto College, you will write a business plan and develop tactics for putting your plan into action at your own company.

The San Jacinto College small business entrepreneurship program:

• Helps students develop leadership and management skills by providing a basis in analysis and problem solving and an understanding of managing human behavior and resources;
• Places an emphasis on planning, organizing, staffing, and leading through effective communication techniques for roles in purchasing, production control, and marketing; and
• Covers leadership, ethics, and organizational development and helps to focus your thinking about successful methods for operating your business.

Career Opportunities

Graduates of this program are prepared to start their own business of almost any type, such as retail, wholesale, and manufacturing. In addition to preparing the individual for entry into company ownership, the program can enhance the skills of those who are already in business for themselves but wish to increase their knowledge and effectiveness in operating their own companies.

For more information, please contact 281.998.6150

Campus(es)

Central Campus
North Campus
South Campus
Information

Business management is a two-year supervisory training program that combines classroom management theory with practical on-the-job training. The program leads to the associate of applied science in Business Management. The business management curriculum includes courses designed to provide a practical, comprehensive program covering certain managerial activities. The program is designed to meet the needs of people preparing for careers in business and industry such as retailing, wholesaling, industrial management, small business, and human resources. The business management program supports the theory that there is no substitute for world-of-work experience in the learning process. Management course work includes studies in basic principles of management, human relations, group dynamics, motivation of individuals and groups, leadership development, organization of work and people, study of supervisory functions, and many other management interests, including international business and trade.

A Contemporary Approach to Management Training

Concurrent with the business management courses, the supervision major or the small business entrepreneur major is required to take a practicum that coordinates job training with classroom theory. One of the requirements of the practicum course is that a student work a minimum of 20 hours per week at a training station approved by a business management coordinator. Designed as a development tool, the practicum requires that the business management coordinator, the employer and the student agree on a tentative training outline or personal development plan which, according to specific guidelines, must improve, enhance and demonstrate personal and professional managerial skills of the student at work.

Note: Students taking the Cooperative Education BMGT 2382 Cooperative Education - Business Administration and Management, General course should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2382 Cooperative Education - Business Administration and Management, General cooperative education course helps the student receive practical training and experience compatible with his or her management career objectives.

Associate of Applied Science Degree

The Business Management Entrepreneur Associate of Applied Science is suitable for anyone who desires to own or manage a small business. This two-year degree program has been recommended by an advisory committee of small business owners. Students pursuing a bachelor’s degree should see a counselor or the business department chair prior to registration.

Plan of Study

All Campuses

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Second Term

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<td>BUSG 2309</td>
<td>Small Business Management</td>
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<td>MRKG 2333</td>
<td>Principles of Selling</td>
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<td>HRPO 2303</td>
<td>Employment Practices</td>
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<td>BMGT 1344</td>
<td>Negotiations and Conflict Management</td>
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Third Term

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<td>MRKG 2312</td>
<td>E-Commerce Marketing</td>
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<td>Cooperative Education - Business Administration and Management, General</td>
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<td>Leadership</td>
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Fourth Term

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<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
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<tr>
<td>or College Algebra</td>
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<td>ECON 2302 or PSYC 2301</td>
<td>Principles of Microeconomics or General Psychology</td>
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<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
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<td>PHIL 1301</td>
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Credits 15

Total Credits 60

Capstone Experience: BMGT 2382 Cooperative Education - Business Administration and Management, General

1 Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra College Algebra.
Business Management - Entrepreneur, Certificate of Technology

Program Information

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Campus(es)

Central Campus
North Campus
South Campus

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A Contemporary Approach to Management Training

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Note: Students taking the Cooperative Education BMGT 2382 Cooperative Education - Business Administration and Management, General course should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2382 Cooperative Education - Business Administration and Management, General cooperative education course helps the student receive practical training and experience compatible with his or her management career objectives.

Certificate of Technology

The Business Management Entrepreneur Certificate of Technology program is designed for students who desire to earn a credential after one year of study. All courses required for the certificate of technology may apply toward the Business Management Entrepreneur Associate of Applied Science.

Plan of Study

All Campuses

4BMGT-ENTR

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<th>Title</th>
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San Jacinto College 2018-2019
Second Term

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<td>ACNT 1311</td>
<td>Introduction to Computerized Accounting</td>
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</tr>
<tr>
<td>MRKG 2333</td>
<td>Principles of Selling</td>
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Credits 15

Total Credits 30

Capstone Experience: BUSG 2309 Small Business Management

Business Management - Entrepreneurship, Level 2 Certificate

Program Information

Shifting economic conditions, breakthrough technologies, and a highly opportunistic business environment have led to a vast resurgence of the startup business. Entrepreneurs abound, and those with the most well-rounded business management skills are best poised for success. At San Jacinto College, you will learn principles vital to the formation, organization, leadership, and control of your own business, such as market analysis, problem solving, planning, staffing, purchasing, marketing, communication, and workforce management. At San Jacinto College, you will write a business plan and develop tactics for putting your plan into action at your own company.

The San Jacinto College small business entrepreneurship program:

- Helps students develop leadership and management skills by providing a basis in analysis and problem solving and an understanding of managing human behavior and resources;
- Places an emphasis on planning, organizing, staffing, and leading through effective communication techniques for roles in purchasing, production control, and marketing; and
- Covers leadership, ethics, and organizational development and helps to focus your thinking about successful methods for operating your business.

Career Opportunities

Graduates of this program are prepared to start their own business of almost any type, such as retail, wholesale, and manufacturing. In addition to preparing the individual for entry into company ownership, the program can enhance the skills of those who are already in business for themselves but wish to increase their knowledge and effectiveness in operating their own companies.

For more information, please contact 281.998.6150

Campus(es)

Central Campus
North Campus
South Campus

Information

Business management is a two-year supervisory training program that combines classroom management theory with practical on-the-job training. The program leads to the associate of applied science in Business Management. The business management curriculum includes courses designed to provide a practical, comprehensive program covering certain managerial activities. The program is designed to meet the needs of people preparing for careers in business and industry such as retailing, wholesaling, industrial management, small business, and human resources. The business management program supports the theory that there is no substitute for world-of-work experience in the learning process. Management course work includes studies in basic principles of management, human relations, group dynamics, motivation of individuals and groups, leadership development, organization of work and people, study of supervisory functions, and many other management interests, including international business and trade.

A Contemporary Approach to Management Training

Concurrent with the business management courses, the supervision major or the small business entrepreneur major is required to take a practicum that coordinates job training with classroom theory. One of the requirements of the practicum course is that a student work a minimum of 20 hours per week at a training station approved by a business management coordinator. Designed as a development tool, the practicum requires that the business management coordinator, the employer and the student agree on a tentative training outline or personal development plan which, according to specific guidelines, must improve, enhance and demonstrate personal and professional managerial skills of the student at work.

Note: Students taking the Cooperative Education BMGT 2382 Cooperative Education - Business Administration and Management, General course should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2382 Cooperative Education - Business Administration and Management, General cooperative education course helps the student receive practical training and experience compatible with his or her management career objectives.

Plan of Study

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<tr>
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<td>ACNT 1303</td>
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</table>
BMGT 1305 Communications in Management 3

Credits 15

Second Term
BUSG 2309 Small Business Management 3
MRKG 2333 Principles of Selling 3
ACNT 1311 Introduction to Computerized Accounting 3
HRPO 2303 Employment Practices 3
BMGT 1344 Negotiations and Conflict Management 3

Credits 15

Third Term
ACNT 1329 Payroll and Business Tax Accounting 3
BMGT 2309 Leadership 3
BUSG 1341 Small Business Financing 3
MRKG 2312 E-Commerce Marketing 3
BMGT 2382 Cooperative Education - Business Administration and Management, General 3

Credits 15

Total Credits 45

Capstone Experience: BMGT 2382 Cooperative Education - Business Administration and Management, General

Business Management - Retail Management, Certificate of Technology

Program Information
The business environment is constantly changing; therefore, effective and efficient management requires learning and applying the latest techniques in management to advance your career and become a more valuable manager in the organization. As a graduate of the San Jacinto College business management program, you will be prepared to assume first-line supervisory positions in business organizations of every type. You will also be on a career track to higher levels of management as your experience grows in applying the concepts and techniques learned at San Jacinto College.

The San Jacinto College business management program:

• Helps students develop leadership and management skills by providing a basis in analysis and problem solving and an understanding of managing human behavior and resources; and
• Places an emphasis on planning, organizing, staffing, and leading through effective communication techniques for roles in purchasing, production control, and marketing.

Course topics may include:
• Marketing
• Management
• Leadership
• Purchasing
• Selling
• Human Relations
• Human Resources
• Problem Solving
• Decision-Making

Career Opportunities
Graduates of this program are prepared to assume first-line supervisory positions in business organizations of every type including:

• Retail
• Wholesale
• Manufacturing
• Materials management
• Distribution
• Governmental agencies
• Nonprofits

Earning Potential
Earning potential varies based on industry. This is just an example of one industry's earning potential.

First-Line Supervisor in Retail Sales median salary: $40,952 per year


For more information, please contact 281-998-6150.

Campus(es)
Central Campus
North Campus
South Campus

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Certificate of Technology

The Retail Management Certificate of Technology program is designed for students who desire to work in leadership roles in the retail industry. This certificate is cross-walked with the retail industry recognized retail management industry certification. Most of the courses required for the certificate of technology apply toward an associate of applied science degree in Business Management.

Plan of Study

All Campuses
4BMGT-RTLM

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<tr>
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Capstone Experience: MRKG 1302 Principles of Retailing

Business Management, Associate of Applied Science

Program Information

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Course topics may include:

- Marketing
- Management
- Leadership
- Purchasing
- Selling
- Human Relations
- Human Resources
- Problem Solving
- Decision-Making

Career Opportunities

Graduates of this program are prepared to assume first-line supervisory positions in business organizations of every type including:

- Retail
- Wholesale
- Manufacturing
- Materials management
- Distribution
- Governmental agencies
- Nonprofits
Earning Potential

Earning potential varies based on industry. This is just an example of one industry's earning potential.

First-Line Supervisor in Retail Sales median salary: $40,952 per year

Source: texasswages.com, Gulf Coast region, 2017.

For more information, please contact Central, 281-476-1841; North, 281-998-6150 x 7765; and South, 281-929-4603.

Campus(es)

Central Campus
North Campus
South Campus

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Associate of Applied Science

The Associate of Applied Science in Business Management is a two-year supervisory training program for people preparing for careers in business management. Students pursuing a bachelor's degree should see an educational planner/counselor or the department chair of the Business Administration Department prior to registration.

Plan of Study

All Campuses

3BMGT-MGMT

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<tr>
<th>Course</th>
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<th>Credits</th>
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<td>BMGT 1327</td>
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<td>IBUS 2341</td>
<td>Intercultural Management</td>
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<td>BMGT 1309</td>
<td>Information and Project Management</td>
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<td>Business Communications</td>
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<td>MRKG 2312</td>
<td>E-Commerce Marketing</td>
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<td>Problem Solving and Decision Making</td>
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<td>BMGT 1313</td>
<td>Principles of Purchasing</td>
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Capstone Experience: BMGT 2382 Cooperative Education - Business Administration and Management, General

Note: Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.
Business Management, Level 2 Certificate

Program Information
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- Decision-Making

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South Campus

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Plan of Study
All Campuses
5BMGT-MGMT

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<td>ACNT 1303 Introduction to Accounting I</td>
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<td>BMGT 1309 Information and Project Management</td>
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<tr>
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<td>Third Term</td>
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<td>BUSI 2301 Business Law</td>
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<td>BMGT 2309 Leadership</td>
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<td>BMGT 1313 Principles of Purchasing</td>
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<td>BMGT 2303 Problem Solving and Decision Making</td>
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**Capstone Experience:** BMGT 2382 Cooperative Education - Business Administration and Management, General

**Business Management, Occupational Certificate**

**Program Information**

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- Purchasing
- Selling
- Human Relations
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- Problem Solving
- Decision-Making

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- Distribution
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- Nonprofits

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**Campus(es)**

Central Campus
North Campus
South Campus

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Plan of Study

All Campuses
6BMGT-MGMT

Plan of Study Grid

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HRPO 1311 Human Relations</td>
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<tbody>
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<td>BUSI 2304 Business Communications</td>
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Capstone Experience: HRPO 1311 Human Relations

Business Marketing Foundations of Marketing Specialty, Occupational Certificate

Program Information

The business environment is constantly changing; therefore, effective and efficient management requires learning and applying the latest techniques in management to advance your career and become a more valuable manager in the organization. As a graduate of the San Jacinto College business management program, you will be prepared to assume first-line supervisory positions in business organizations of every type. You will also be on a career track to higher levels of management as your experience grows in applying the concepts and techniques learned at San Jacinto College.

The San Jacinto College business management program:

- Helps students develop leadership and management skills by providing a basis in analysis and problem solving and an understanding of managing human behavior and resources; and
- Places an emphasis on planning, organizing, staffing, and leading through effective communication techniques for roles in purchasing, production control, and marketing.

Course topics may include:

- Marketing
- Management
- Leadership
- Purchasing
- Selling
- Human Relations
- Human Resources
- Problem Solving
- Decision-Making

Career Opportunities

Graduates of this program are prepared to assume first-line supervisory positions in business organizations of every type including:

- Retail
- Wholesale
- Manufacturing
- Materials management
- Distribution
• Governmental agencies
• Nonprofits

**Earning Potential**

Earning potential varies based on industry. This is just an example of one industry's earning potential.

**First-Line Supervisor in Retail Sales**

Median salary: $40,952 per year


For more information, please contact Central, 281-476-1841; North, 281-998-6150 x 7765; and South, 281-929-4603.

**Campus(es)**

Central Campus
North Campus
South Campus

**Information**

Business management is a two-year supervisory training program that combines classroom management theory with practical on-the-job training. The program leads to the associate of applied science in Business Management. The business management curriculum includes courses designed to provide a practical, comprehensive program covering certain managerial activities. The program is designed to meet the needs of people preparing for careers in business and industry such as retailing, wholesaling, industrial management, small business, and human resources. The business management program supports the theory that there is no substitute for world-of-work experience in the learning process. Management course work includes studies in basic principles of management, human relations, group dynamics, motivation of individuals and groups, leadership development, organization of work and people, study of supervisory functions, and many other management interests, including international business and trade.

**A Contemporary Approach to Management Training**

Concurrent with the business management courses, the supervision major or the small business entrepreneur major is required to take a practicum that coordinates job training with classroom theory. One of the requirements of the practicum course is that a student work a minimum of 20 hours per week at a training station approved by a business management coordinator. Designed as a development tool, the practicum requires that the business management coordinator, the employer and the student agree on a tentative training outline or personal development plan which, according to specific guidelines, must improve, enhance and demonstrate personal and professional managerial skills of the student at work.

**Note:** Students taking the Cooperative Education BMGT 2382 Cooperative Education - Business Administration and Management, General course should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2382 Cooperative Education - Business Administration and Management, General cooperative education course helps the student receive practical training and experience compatible with his or her management career objectives.

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**Plan of Study**

**All Campuses**

**6BMGT-MRKG**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>HRPO 1311</td>
<td>Human Relations</td>
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<td>MRKG 1311</td>
<td>Principles of Marketing</td>
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<td>MRKG 2333</td>
<td>Principles of Selling</td>
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<td>MRKG 2312</td>
<td>E-Commerce Marketing</td>
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<td>Total Credits</td>
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**Capstone Experience:** MRKG 2312 E-Commerce Marketing

**Business, Administrative Assistant, Certificate of Technology**

**Program Information**

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills that enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace **soft skills** employers demand.

The San Jacinto College Business Office Systems and Support (BOSS) program:

- Provides graduates with the skills, knowledge, and training that will enable them to be successful in a business office environment;
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- Ensures that students will be able to manage a variety of administrative duties such as planning meetings, scheduling appointments, preparing reports, greeting visitors, and assuming...
responsibilities including organizing an office and resolving relational problems with people inside and outside the organization.

Career Opportunities

Graduates of the San Jacinto College BOSS program are employed in:

- Schools
- Hospitals
- Corporate Settings
- Government agencies

Graduate opportunities may also extend beyond this program with certification from the International Association of Administrative Professionals as a Certified Administrative Professional (CAP). Certification in this field usually leads to a higher salary.

Earning Potential

Executive Administrative Assistant - $61,846 per year


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Campus(es)

Central Campus
North Campus
South Campus

Information

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Completion of the Office Assistant Occupational Certificate is the first step to take toward achieving your goal of having a fulfilling and challenging career in this field. Keyboarding proficiency is recommended for all the certificates as well as the degree in this program.

Certificate of Technology

These courses are required for the Administrative Assistant Certificate of Technology, and they also apply toward the level 2 certificate and the associate of applied science degree in the Business Office Systems and Support (BOSS) program.

Plan of Study

All Campuses

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<td>Business Computer Applications</td>
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<td>POFT 1309</td>
<td>Administrative Office Procedures I</td>
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<td>POFT 1319</td>
<td>Records and Information Management I</td>
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</table>

Total Credits 30

Capstone Experience: POFT 2301 Intermediate Keyboarding

Business, Associate of Arts

A Smart Business Choice

If your goal is to lead others in business, we can help provide you with the leadership skills you need. The San Jacinto College Business Administration Associate of Arts degree program teaches the latest advancements in effective management and develops your acumen in leadership, problem solving, communication, purchasing, planning, staffing, marketing, production control and resource optimization.

Upon graduation, students will be equipped to assume a first-line supervisory position in industries like retail, manufacturing, government and nonprofit. The Associate of Arts program also provides current business professionals the skills and competencies necessary for faster career advancement.

The Associate of Arts degree program in business administration also provides students an industry-relevant foundation to four-year university bachelor’s and master’s business degree programs.

Career Opportunities

Students pursuing a bachelor’s or master’s degree pathway in business will be prepared for careers as:

- Budget Analysts $80,810*
- Compensation and Benefits Managers $127,737*
- Compliance Officers $83,361*
- Construction Managers $107,356*
- Credit Analysts $84,978*
- Financial Analysts $99,775*

• Human Resources Managers $145,121*
• Insurance Underwriters $66,514*

*Source: www.texaswages.com, 2017 annual median salaries for Gulf Coast region

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major.

Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

### All Campuses

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<td>Transfer Path</td>
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<td>Academic elective (if successfully completed GUST 0305)</td>
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<td>Business Computer Applications</td>
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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<td>Academic elective (if student passes the computer literacy exam)</td>
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<td>Communications</td>
<td>Select two of the following:</td>
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<td>Composition I (required)</td>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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<td>MATH 1316</td>
<td>Plane Trigonometry</td>
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<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences 1</td>
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<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences 1</td>
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<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) 1</td>
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<td>Stars and Galaxies (lecture)</td>
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<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
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<td>BIOL 1306</td>
<td>Biology for Science Majors I (lecture)</td>
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<td>BIOL 1307</td>
<td>Biology for Science Majors II (lecture)</td>
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<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (lecture) 4</td>
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<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (lecture) 4</td>
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<td>BIOL 1313</td>
<td>General Zoology (lecture)</td>
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<td>BIOL 2302</td>
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<td>Introductory Chemistry I (lecture) 4</td>
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<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
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<td>GEOL 1301</td>
<td>Earth Sciences for Non-Science Majors I (lecture) 4</td>
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<td>GEOL 1303</td>
<td>Physical Geology (lecture)</td>
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<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
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<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
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<td>PHYS 1301</td>
<td>College Physics I (lecture)</td>
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<td>College Physics II (lecture)</td>
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<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
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<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
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<td>Language, Philosophy, and Culture (Humanities)</td>
<td>Select one of the following:</td>
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<td>ENGL 2322</td>
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<td>ENGL 2323</td>
<td>British Literature II</td>
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<td>ENGL 2327</td>
<td>American Literature I</td>
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<td>ENGL 2328</td>
<td>American Literature II</td>
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<td>ENGL 2332</td>
<td>World Literature I</td>
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<td>ENGL 2333</td>
<td>World Literature II</td>
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<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
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<td>ENGL 2351</td>
<td>Mexican American Literature</td>
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<td>GEOG 1302</td>
<td>Human Geography</td>
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<td>HIST 2321</td>
<td>World Civilization I</td>
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<td>HIST 2322</td>
<td>World Civilization II</td>
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<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
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<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
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<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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<td>Art Appreciation</td>
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<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
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<tr>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
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<tr>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
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<tr>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
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### San Jacinto College

### 2018-2019

**American History**
- Select two of the following: 6
  - HIST 1301 United States History I
  - HIST 1302 United States History II
  - HIST 2301 Texas History
  - HIST 2327 Mexican American History I
  - HIST 2328 Mexican American History II

**Government/Political Science**
- Select two of the following: 6
  - GOVT 2305 Federal Government (Federal Constitution and Topics)
  - GOVT 2306 Texas Government (Texas Constitution and Topics)

**Social and Behavioral Sciences**
- Select one of the following: 3
  - ANTH 2302 Introduction to Archaeology
  - ANTH 2346 General Anthropology
  - ANTH 2351 Cultural Anthropology
  - ECON 2301 Principles of Macroeconomics
  - ECON 2302 Principles of Microeconomics
  - GEOG 1303 World Regional Geography
  - GOVT 2304 Introduction to Political Science
  - HIST 2311 Western Civilization I
  - HIST 2312 Western Civilization II
  - PSYC 2301 General Psychology
  - SOCI 1301 Introduction to Sociology
  - SOCI 2319 Minority Studies I

**Component Area Option**
- Select two of the following: 6
  - SPCH 1311 Introduction to Speech Communication
  - SPCH 1315 Public Speaking
  - SPCH 1318 Interpersonal Communications
  - SPCH 1321 Business and Professional Speech
  - PHED 1164 Introduction to Physical Fitness and Wellness
  - CHIN 1411 Beginning Chinese I
  - CHIN 1412 Beginning Chinese II
  - FREN 1411 Beginning French I
  - FREN 1412 Beginning French II
  - GERM 1411 Beginning German I
  - GERM 1412 Beginning German II
  - SGNL 1401 Beginning American Sign Language I
  - SGNL 1402 Beginning American Sign Language II
  - SPAN 1411 Beginning Spanish I
  - SPAN 1412 Beginning Spanish II

**Total Credits** 48

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1. **MATH 1324 Mathematics for Business and Social Sciences**, **MATH 1325 Calculus for Business and Social Sciences**, and **MATH 1332 Contemporary Mathematics (Quantitative Reasoning)** are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. **MATH 1342 is required for a bachelor's degree in nursing.**

4. **BIOL 1308 Biology for Non-Science Majors I (Lecture)**, **BIOL 1309 Biochemistry for Non-Science Majors II (Lecture)** and **CHEM 1305 Introductory Chemistry I (lecture)** do not meet the requirements for science majors.

5. **BIOL 2301 Human Anatomy and Physiology I (Lecture)** and **BIOL 2302 Human Anatomy and Physiology II (Lecture)** are designed for allied health majors and not for academic transfer as science majors.

6. Students who have taken **GOVT 2301 or GOVT 2302**, but not both, should check with an educational planner on how to complete the 6 SCH.

7. 2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

### Business, Executive Administrative Assistant, Associate of Applied Science

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**Associate of Applied Science**

This two-year Executive Administrative Assistant Associate of Applied Science degree provides the most in-depth preparation for employment as a professional in the administrative assistant field. Students desiring a baccalaureate degree should see an advisor or the department chair of the program prior to registration.

**Plan of Study**

All Campuses

| 3BOFT-EXE |

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<td>ACNT 1311</td>
<td>Introduction to Computerized Accounting</td>
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</tr>
<tr>
<td>POFI 1341</td>
<td>Computer Applications II</td>
<td>3</td>
</tr>
<tr>
<td>BUSI 2304</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>POFT 2301</td>
<td>Intermediate Keyboarding</td>
<td>3</td>
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<tr>
<td></td>
<td>Credits</td>
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<tr>
<td><strong>Third Term</strong></td>
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<tr>
<td>BUSI 1301</td>
<td>Business Principles</td>
<td>3</td>
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<tr>
<td>MATH 1332</td>
<td>or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)^1 or College Algebra</td>
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<tr>
<td>HRPO 1311</td>
<td>Human Relations</td>
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<td>BMGT 1309</td>
<td>Information and Project Management</td>
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</tr>
<tr>
<td>POFT 2364</td>
<td>or POFT 1313</td>
<td>Practicum (or Field Experience) - Administrative Assistant and Secretarial Science, General</td>
</tr>
<tr>
<td></td>
<td>or Professional Workforce Preparation</td>
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<td><strong>Fourth Term</strong></td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>Psychology or Sociology</td>
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<td>3</td>
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<td>3</td>
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<td>SPCH 1315</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
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<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
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</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td>3</td>
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</tbody>
</table>

San Jacinto College 2018-2019
Capstone Experience: POFT 2364 Practicum or POFT 1313 Professional Workforce Preparation

1. Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.
2. Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities); Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College catalog.

Business, Executive Administrative Assistant, Level 2 Certificate

Program Information

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills which enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace soft skills employers demand.

The San Jacinto College Business Office Systems and Support (BOSS) program:

• Provides graduates with the skills, knowledge, and training that will enable them to be successful in a business office environment;
• Offers courses in the latest office techniques, current technology, accounting terminology, financial document preparation, filing procedures, oral and written communication skills, and business forms preparation; and
• Ensures that students will be able to manage a variety of administrative duties such as planning meetings, scheduling appointments, preparing reports, greeting visitors, and assuming responsibilities including organizing an office and resolving relational problems with people inside and outside the organization.

Career Opportunities

Graduates of the San Jacinto College BOSS program are employed in:

• Schools
• Hospitals
• Corporate Settings
• Government agencies

Graduate opportunities may also extend beyond this program with certification from the International Association of Administrative Professionals as a Certified Administrative Professional (CAP). Certification in this field usually leads to a higher salary.

Earning Potential

Executive Administrative Assistant - $61,846 per year


For more information, please contact 281-998-6150.

Campus(es)

Central Campus
North Campus
South Campus

Information

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills which enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace soft skills employers demand.

Completion of the Office Assistant Occupational Certificate is the first step to take toward achieving your goal of having a fulfilling and challenging career in this field. Keyboarding proficiency is recommended for all the certificates as well as the degree in this program.

Level 2 Certificate

These courses are required for the Executive Administrative Assistant Level 2 Certificate, and they also apply toward the associate of applied science degree in the Business Office Systems and Support (BOSS) program.

Plan of Study

All Campuses 5BOFF-E

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACNT 1303</td>
<td>Introduction to Accounting I</td>
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<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
<td>3</td>
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<tr>
<td>POFT 1301</td>
<td>Business English</td>
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<td>POFT 1309</td>
<td>Administrative Office Procedures I</td>
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### Course Information

#### Business, Management Specialty, Certificate of Technology

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<td>POFT 1319</td>
<td>Records and Information Management I</td>
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<td>POFT 1325</td>
<td>Business Math Using Technology</td>
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<td>Introduction to Computerized Accounting</td>
<td>3</td>
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<td>POFI 1341</td>
<td>Computer Applications II</td>
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<td>BUSI 2304</td>
<td>Business Communications</td>
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<tr>
<td>POFT 2301</td>
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<td></td>
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#### Third Term

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>BUSI 1301</td>
<td>Business Principles</td>
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<td>HRPO 1311</td>
<td>Human Relations</td>
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<td>BMGT 1325</td>
<td>Office Management</td>
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<td>POFT 2364</td>
<td>Practicum (or Field Experience) - Administrative Assistant and Secretarial Science, General</td>
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<tr>
<td>or POFT 1313</td>
<td>or Professional Workforce Preparation</td>
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<tr>
<td></td>
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</tbody>
</table>

**Capstone Experience:** POFT 2364 Practicum or POFT 1313 Professional Workforce Preparation

### Program Information

The business environment is constantly changing; therefore, effective and efficient management requires learning and applying the latest techniques in management to advance your career and become a more valuable manager in the organization. As a graduate of the San Jacinto College business management program, you will be prepared to assume first-line supervisory positions in business organizations of every type. You will also be on a career track to higher levels of management as your experience grows in applying the concepts and techniques learned at San Jacinto College.

The San Jacinto College business management program:

- Helps students develop leadership and management skills by providing a basis in analysis and problem solving and an understanding of managing human behavior and resources; and
- Places an emphasis on planning, organizing, staffing, and leading through effective communication techniques for roles in purchasing, production control, and marketing.

### Course topics may include:

- Marketing
- Management
- Leadership
- Purchasing
- Selling
- Human Relations
- Human Resources
- Problem Solving
- Decision-Making

### Career Opportunities

Graduates of this program are prepared to assume first-line supervisory positions in business organizations of every type including:

- Retail
- Wholesale
- Manufacturing
- Materials management
- Distribution
- Governmental agencies
- Nonprofits

### Earning Potential

Earning potential varies based on industry. This is just an example of one industry's earning potential.

First-Line Supervisor in Retail Sales median salary: $40,952 per year


For more information, please contact Central, 281-476-1841; North, 281-998-6150 x 7765; and South, 281-929-4603.

### Campus(es)

Central Campus
North Campus
South Campus

### Information

Business management is a two-year supervisory training program that combines classroom management theory with practical on-the-job training. The program leads to the associate of applied science in Business Management. The business management curriculum includes courses designed to provide a practical, comprehensive program covering certain managerial activities. The program is designed to meet the needs of people preparing for careers in business and industry such as retailing, wholesaling, industrial management, small business, and human resources. The business management program supports the theory that there is no substitute for world-of-work experience in the learning process. Management course work includes studies in basic principles of management, human relations, group dynamics, motivation of individuals and groups, leadership development, organization of work and people, study of supervisory functions, and many other management interests, including international business and trade.
A Contemporary Approach to Management Training

Concurrent with the business management courses, the supervision major or the small business entrepreneur major is required to take a practicum that coordinates job training with classroom theory. One of the requirements of the practicum course is that a student work a minimum of 20 hours per week at a training station approved by a business management coordinator. Designed as a development tool, the practicum requires that the business management coordinator, the employer and the student agree on a tentative training outline or personal development plan which, according to specific guidelines, must improve, enhance and demonstrate personal and professional managerial skills of the student at work.

Note: Students taking the Cooperative Education BMGT 2382 Cooperative Education - Business Administration and Management, General course should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2382 Cooperative Education - Business Administration and Management, General cooperative education course helps the student receive practical training and experience compatible with his or her management career objectives.

Certificate of Technology

The Management Specialty Certificate of Technology program is designed for students who desire to earn a credential after one year of study. All courses required for the certificate of technology apply toward an associate of applied science degree in Business Management.

Plan of Study

All Campuses
4BMGT-MGMT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<td>HRPO 1311</td>
<td>Human Relations</td>
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<tr>
<td>MRKG 1311</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>ACNT 1303</td>
<td>Introduction to Accounting I</td>
<td>3</td>
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<td>BMGT 1327</td>
<td>Principles of Management</td>
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<td><strong>Second Term</strong></td>
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<td>HRPO 2301</td>
<td>Human Resources Management</td>
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<td>BUSI 2304</td>
<td>Business Communications</td>
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<td>MRKG 2312</td>
<td>E-Commerce Marketing</td>
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<td>IBUS 2341</td>
<td>Intercultural Management</td>
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<td><strong>Total Credits</strong></td>
<td>30</td>
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</table>

Business, Medical Office Support, Enhanced Skills Certificate

Program Information

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills that enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace soft skills employers demand.

The San Jacinto College Business Office Systems and Support (BOSS) program:

- Provides graduates with the skills, knowledge, and training that will enable them to be successful in a business office environment;
- Offers courses in the latest office techniques, current technology, accounting terminology, financial document preparation, filing procedures, oral and written communication skills, and business forms preparation; and
- Ensures that students will be able to manage a variety of administrative duties such as planning meetings, scheduling appointments, preparing reports, greeting visitors, and assuming responsibilities including organizing an office and resolving relational problems with people inside and outside the organization.

Career Opportunities

Graduates of the San Jacinto College BOSS program are employed in:

- Schools
- Hospitals
- Corporate Settings
- Government agencies

Graduate opportunities may also extend beyond this program with certification from the International Association of Administrative
Professionals as a Certified Administrative Professional (CAP). Certification in this field usually leads to a higher salary.

**Earning Potential**

Executive Administrative Assistant - $61,846 per year

1 Source: texasswages.com (http://texasswages.com), Gulf Coast region, 2017.

For more information, please contact 281-998-6150.

**Campus(es)**

Central Campus  
North Campus  
South Campus

**Information**

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills which enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace “soft skills” employers demand.

Completion of the Office Assistant Occupational Certificate is the first step to take toward achieving your goal of having a fulfilling and challenging career in this field. Keyboarding proficiency is recommended for all the certificates as well as the degree in this program.

**Enhanced Skills Certificate**

The Medical Office Support Enhanced Skills Certificate is designed for students who have completed the Executive Administrative Assistant Associate of Applied Science Degree. This certificate is intended to prepare students for entry-level positions in medical office administrative/billing positions.

**Plan of Study**

**All Campuses**

EBOTM

Please see Executive Administrative Assistant, Associate of Applied Science page for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>HPRS 2302</td>
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<td>MRMT 1307</td>
<td>Medical Transcription I</td>
<td>3</td>
</tr>
<tr>
<td>POFM 1327/MDCA 1343</td>
<td>Medical Insurance</td>
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<td>POFM 1317</td>
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**Capstone Experience**: POFM 1317 Medical Administrative Support

**Program Information**

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- Ensures that students will be able to manage a variety of administrative duties such as planning meetings, scheduling appointments, preparing reports, greeting visitors, and assuming responsibilities including organizing an office and resolving relational problems with people inside and outside the organization.

**Career Opportunities**

Graduates of the San Jacinto College BOSS program are employed in:

- Schools
- Hospitals
- Corporate Settings
- Government agencies

Graduate opportunities may also extend beyond this program with certification from the International Association of Administrative Professionals as a Certified Administrative Professional (CAP). Certification in this field usually leads to a higher salary.
Earning Potential

Executive Administrative Assistant - $61,846 per year


For more information, please contact 281-998-6150.

Campus(es)
Central Campus
North Campus
South Campus

Information

Now more than ever, administrative assistants play an integral role in the success of an organization. They are highly valued, collaborative team members with a wide range of skills which enable them to work in a variety of industries. In the Business Office Systems and Support (BOSS) program, our students develop competencies in office procedures, software applications, accounting skills, organizational skills, office management, and project management, as well as in the essential workplace “soft skills” employers demand.

Completion of the Office Assistant Occupational Certificate is the first step to take toward achieving your goal of having a fulfilling and challenging career in this field. Keyboarding proficiency is recommended for all the certificates as well as the degree in this program.

Occupational Certificate

The Office Assistant Occupational Certificate is designed to provide students with entry-level office skills. All courses in this certificate also apply toward the certificate of technology, the level 2 certificate, and the associate of applied science degree in the Business Office Systems and Support (BOSS) program. The attainment of each higher-level certificate prepares students for work as an administrative assistant with progressively greater responsibility and skill level.

Plan of Study

All Campuses
6B0OA

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tr>
<td>First Term</td>
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<td>ACNT 1303</td>
<td>Introduction to Accounting I</td>
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<td>BCIS 1305</td>
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<td>POFT 1309</td>
<td>Administrative Office Procedures I</td>
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</tr>
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<td>POFT 1319</td>
<td>Records and Information Management I</td>
<td>3</td>
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<tr>
<td>POFT 1325</td>
<td>Business Math Using Technology</td>
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<table>
<thead>
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</table>

Capstone Experience: POFT 1319 Records and Information Management I

Global Logistics and Supply Chain Management, Associate of Applied Science

Program Information

Want to see the busiest and most profitable marketplace society has ever built? Just take a look around you! We live in a global economy. International trade is how tens of thousands of companies function, from huge corporations to small shops. Become a vital link in this chain of commerce with a degree from San Jacinto College. Our program teaches you the complexities of successfully operating in the global logistics community. You may decide to become an importer-exporter or enter the fast-changing world of wholesale and retail buying or one of the many other options that a degree from San Jacinto College opens for you!

The San Jacinto College global logistics and supply chain management program:

- Is designed to prepare students for careers in transportation industries, international logistics, and global supply chain management industries;
- Offers a solid foundation in import/export management processes, world economics, licensing and documentation, US Customs regulations, and political-legal factors in the foreign trade environment;
- Teaches students about international purchasing and sourcing, international marketing strategies, monetary systems, international and domestic transportation and logistics, organizational culture, and global maritime management; and
- Provides field experience that offers hands-on experience as logistics interns with companies in the Greater Houston area.

Career Opportunities

Graduates of this program will work as specialists in:

- Importing and exporting
- Trade compliance
- The United States government
- Freight forwarders
- Custom brokers
- Ocean/truck/air/rail transportation
- Logistics
- Retail and wholesale representatives
Earning Potential
Production, Planning, and Expediting Clerk median salary: $48,186 per year

\(^{1}\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017.

For more information, please contact 281-998-6150, x 7242.

Campus
North Campus

Information
The Global Logistics and Supply Chain Management program is designed to produce graduates who are qualified for entry-level positions in a multitude of career opportunities in distribution, transportation, warehousing, trucking operations, supply chain, and manufacturing organizations. In today's global marketplace, there are unprecedented opportunities for logistics and supply chain management professionals who are capable of integrating and optimizing all the steps required to deliver the right product to the right customer at the right time. With the performance of the logistical and supply chain process being a critical factor in a company's profitability, the demand for skilled workers in this field continues to increase. All the program courses listed in the certificate of technology below also apply toward the Global Logistics and Supply Chain Management Associate of Applied Science (AAS) degree. A student completing the courses as outlined per term can complete this AAS degree in two years.

Plan of Study
North Campus
3GLOBL-LOG

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>IBUS 1300</td>
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<td>BCIS 1305</td>
<td>Business Computer Applications or ITSC 1309</td>
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<tr>
<td>LMGT 1325</td>
<td>Warehouse and Distribution Center Management</td>
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<td>LMGT 1319</td>
<td>Introduction to Business Logistics</td>
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<td>Introduction to Materials Handling</td>
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<td>GEOG 1303</td>
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<td><strong>Third Term</strong></td>
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<td>IBUS 1301</td>
<td>Principles of Exports</td>
<td>3</td>
</tr>
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<td>IBUS 1341</td>
<td>Introduction to International Supply Chain Global Management</td>
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</tr>
<tr>
<td>IBUS 2341</td>
<td>Intercultural Management</td>
<td>3</td>
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</table>

**Fourth Term**
IBUS 1302   Principles of Imports                     | 3       |
IBUS 1354   International Marketing Management        | 3       |
LMGT 1345   Economics of Transportation and Distribution | 3       |
LMGT 2330   International Logistics Management         | 3       |
IBUS 2335   International Business Law                 | 3       |

|             | **Credits**                                      | **15**  |

**Total Credits**
60

Capstone Experience: IBUS 2367 Practicum - Field Experience or IBUS 2332 Global Business Simulation

\(^{1}\) Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.

Global Logistics and Supply Chain Management, Certificate of Technology

Program Information
Want to see the busiest and most profitable marketplace society has ever built? Just take a look around you! We live in a global economy. International trade is how tens of thousands of companies function, from huge corporations to small shops. Become a vital link in this chain of commerce with a degree from San Jacinto College. Our program teaches you the complexities of successfully operating in the global logistics community. You may decide to become an importer-exporter or enter the fast-changing world of wholesale and retail buying or one of the many other options that a degree from San Jacinto College opens for you!

The San Jacinto College global logistics and supply chain management program:

- is designed to prepare students for careers in transportation industries, international logistics, and global supply chain management industries;
- offers a solid foundation in import/export management processes, world economics, licensing and documentation, US Customs regulations, and political-legal factors in the foreign trade environment;
• Teaches students about international purchasing and sourcing, international marketing strategies, monetary systems, international and domestic transportation and logistics, organizational culture, and global maritime management; and
• Provides field experience that offers hands-on experience as logistics interns with companies in the Greater Houston area.

Career Opportunities
Graduates of this program will work as specialists in:
• Importing and exporting
• Trade compliance
• The United States government
• Freight forwarders
• Custom brokers
• Ocean/truck/rail/air transportation
• Logistics
• Retail and wholesale representatives

Earning Potential
Production, Planning, and Expediting Clerk median salary: $48,186 per year¹

For more information, please contact 281-998-6150, x 7242.

Campus
North Campus

Information
The Global Logistics and Supply Chain Management program is designed to produce graduates who are qualified for entry-level positions in a multitude of career opportunities in distribution, transportation, warehousing, trucking operations, supply chain, and manufacturing organizations. In today’s global marketplace, there are unprecedented opportunities for logistics and supply chain management professionals who are capable of integrating and optimizing all the steps required to deliver the right product to the right customer at the right time. With the performance of the logistical and supply chain process being a critical factor in a company’s profitability, the demand for skilled workers in this field continues to increase. All the program courses listed in the certificate of technology below also apply toward the Global Logistics and Supply Chain Management Associate of Applied Science (AAS) degree. A student completing the courses as outlined per term can complete this AAS degree in two years.

Plan of Study
North Campus

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<tr>
<td>IBUS 1300</td>
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<tr>
<td>BCIS 1305</td>
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<td>or ITSC 1309</td>
<td>or Integrated Software Applications I</td>
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<td>Second Term</td>
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<td>LMGT 1323</td>
<td>Domestic and International Transportation</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 1301</td>
<td>Principles of Exports</td>
<td>3</td>
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<tr>
<td>IBUS 1341</td>
<td>Introduction to International Supply Chain</td>
<td>3</td>
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<td>IBUS 2341</td>
<td>Intercultural Management</td>
<td>3</td>
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<td>IBUS 1302</td>
<td>Principles of Imports</td>
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<td>IBUS 1354</td>
<td>International Marketing Management</td>
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<td>LMGT 1345</td>
<td>Economics of Transportation and Distribution</td>
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<td>LMGT 2330</td>
<td>International Logistics Management</td>
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<td>IBUS 2367</td>
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<td>or IBUS 2332</td>
<td>or Global Business Simulation</td>
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Capstone Experience: IBUS 2367 Practicum - Field Experience or IBUS 2332 Global Business Simulation

Long Term Care Administration, Advanced Technical Certificate

Program Objectives
Long term care of the elderly, physically ill and mentally ill is a rapidly growing field with increasing demand for licensed administrators. As the U.S. population ages, the need for quality long term care increases. Employment opportunities are expected to grow at a faster rate than many other areas of business management. Nursing home administrators are responsible for the daily operations of nursing homes that comply with federal, state and local governmental agency requirements. They are responsible for patient admissions, facility operations, personnel management, accounting, budget planning, insurance regulations and more. The advanced technical certificate in long term care administration (LTCA) program offered at the San Jacinto College Central Campus will assist you in developing the leadership and critical thinking skills needed to succeed in this unique business environment.
As health care continues to follow a more businesslike approach, business degrees have become a professional necessity. The LTCA program is open to anyone who already holds a minimum of a bachelor’s degree conferred by an accredited educational institution. The degree should be in business, business management, healthcare administration, nursing or some other closely-related discipline.

The LTCA program is designed to equip students for successful careers as the administrators of long term care in Texas. The state licensing exam is offered through the Texas Department of Aging and Disability Services (DADS). The requirements to take the state exam include successful completion of 15 credit hours of course work as well as completing a 1,000-hour administrator-in-training (AIT) internship with a DADS-approved Preceptor in a licensed nursing home with a minimum of 60 beds.

The LTCA program includes the required course work and internship hours to apply to take the licensing exam required by the State of Texas. In addition to the state licensing exam, Texas also requires that you successfully complete a national exam for licensure in the state of Texas. The national exam is administered by DADS on behalf of the National Association of Boards of Examiners for Long Term Care Administration (NAB).

**Additional Information**

The National Association of Boards of Examiners for long term care administrators (NAB) requires that you complete certain topics of study as part of, or in addition to, a bachelor’s degree.

Questions regarding licensure and state exam requirements should be directed to the Texas Department of Aging and Disability Services (DADS) at 512-438-3011 or www.dads.state.tx.us (http://www.dads.state.tx.us).

**Career Opportunities**

An advanced technical certificate in long term care prepares you to manage the business and administrative aspects of residential care for the elderly and chronically ill including managing:

- Nursing homes
- Assisted living facilities
- Retirement communities
- Hospices

For more information contact 281-998-6150 ext. 1841.

**Campus**

Central Campus

Long term care of the elderly, physically ill and mentally ill is a rapidly growing field with increasing demand for licensed administrators. As the U.S. population ages, the need for quality long term care increases, and employment opportunities are expected to grow at a faster rate than many other areas of business management. Nursing home administrators are responsible for the daily operations of nursing homes that comply with federal, state and local governmental agency requirements. They are responsible for patient admissions, facility operations, personnel management, accounting, budget planning, insurance regulations and more. The Advanced Technical Certificate in the long term care administration (LTCA) program offered by San Jacinto College Central Campus will develop the leadership and critical thinking skills students need to succeed in this unique business environment while also focusing on the practical aspects of long term care. As healthcare continues to follow a more businesslike approach, business degrees have become a professional necessity.

The LTCA program is designed to equip students for successful careers as the administrators of Long Term Care in Texas. The state licensing exam is offered through the Texas Department of Aging and Disability Services (DADS). The requirements to take the state exam include successful completion of 15 credit hours of course work as well as completing a 1,000-hour administrator-in-training (AIT) internship with a DADS-approved Preceptor in a licensed nursing home with a minimum of 60 beds. The LTCA program includes the required coursework and internship hours to apply to take the licensing exam required by the State of Texas. In addition to the state licensing exam, Texas also requires that students successfully complete a national exam for licensure in the state of Texas. The national exam is administered by DADS on behalf of the National Association of Boards of Examiners for Long-Term Care Administration (NAB). Questions regarding licensure and state exam requirements should be directed to the Texas Department of Aging and Disability Services (DADS) at 512-438-3011 or www.dads.state.tx.us (http://www.dads.state.tx.us).

The LTCA advanced technical certificate program is open to anyone who already holds a minimum of a bachelor’s degree conferred by an accredited educational institution. The degree should be in business, business management, healthcare administration, nursing, or some other closely related discipline.

**Long-term care administration advanced technical certificate**

Entrance into this program requires a minimum of a bachelor’s degree that has been conferred by an accredited institution. The degree should be in Business, Business Management, Healthcare Administration, Nursing, or some other closely related discipline.

**Plan of Study**

**Central Campus**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>LTCA 2314 Long Term Care Law</td>
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<tr>
<td>LTCA 2315 Financial Management of Long Term Care Facilities</td>
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<td>LTCA 2488 Internship-Health Care Facilities Administration/Management</td>
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<td><strong>Second Term</strong></td>
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<tr>
<td>LTCA 1312 Resident Care in the Long-Term Care Facility</td>
<td>3</td>
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<tr>
<td>LTCA 1313 Organization and Management of Long Term Care Facilities</td>
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<td>LTCA 2489 Internship-Health Care Facilities Administration/Management</td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>LTCA 2310 Environment of Long-Term Care Facility</td>
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</tbody>
</table>

San Jacinto College 2018-2019
Paralegal, Associate of Applied Science

Program Information
What is a paralegal/legal assistant?
A paralegal, also called a legal assistant, is a person who is qualified by education, training or work experience; who is employed or retained by a lawyer, law office, corporation, government agency or other entity; and who performs specifically delegated substantive legal work for which a lawyer is responsible.

What does a Paralegal do?
The lawyer delegates duties to the paralegal. These duties will depend on the individual’s abilities, specialty and/or employment. Generally those duties will include one or more of the following categories:

- Perform legal research
- Interview clients/witnesses and conduct investigations
- Draft legal documents
- Calendar and track deadlines
- Provide litigation support
- Assist at hearings and trials
- Use technology to perform tasks

A paralegal may not provide legal services directly to the public unless specifically authorized by law.

Additional Information
Employment opportunities for the paralegal are wide ranging and numerous. There are many job opportunities for a qualified paralegal including, but not limited to, the following areas:

- Private law firms (70 percent)
- Corporate legal departments
- Insurance companies
- Real estate agencies
- Title companies
- The court system
- Trust and mortgage departments
- Government agencies

Associate of Applied Science
The associate of applied science (A.A.S) paralegal program is approved by the American Bar Association (ABA).

The paralegal curriculum at San Jacinto College is designed to provide students with the knowledge and skills required to work under the supervision of lawyers. The program provides the paralegal student with knowledge and skills for employment in law firms, corporations, government agencies and other legal departments.

Lambda Epsilon Chi (LEX) is the national honor society founded by the American Association for Paralegal Education. San Jacinto College paralegal students who have completed two-thirds of the College’s paralegal program with a 3.25 overall GPA and a 3.5 legal specialty courses GPA, and demonstrate academic excellence may qualify for LEX.

Paralegal Associations
The American Bar Association (ABA)
State Bar of Texas Paralegal Division

SBOT’s Standing Committee mission on paralegals mission is “to promote and assist the legal profession in the use of paralegals,” and it provides articles, resources and links on its website.

- American Bar Association (ABA)
- American Association for Paralegal Education (AAfPE)
- State Bar of Texas, Paralegal Division (TXPD)
- Houston Metropolitan Paralegal Association (HMPA)
- Houston Paralegal Association (HPA)

Career Opportunities
The U.S. Department of Labor predicts the paralegal profession will grow 15 percent through the year 2026. The San Jacinto College paralegal program enjoys more than a 90 percent success rate.

Most of the entry-level job opportunities are with private law firms from one-attorney firms to large firms. The paralegal will usually specialize in one or two areas of law, but some in general practice will work in various areas.

Corporate law departments, government agencies and other legal departments also provide jobs for our graduates.

Paralegals pursue careers in:

- Litigation
- Personal Injury
- Corporate Law
- Criminal Law
- Employee Benefits
- Intellectual Property
- Bankruptcy
- Immigration Law
Real Estate Advanced, Level 2 Certificate

- Family Law
- Real Estate
- and many other areas of law

Internship opportunities include work for paralegals in:
- Law firms
- Corporate business
- Government agencies
- Real estate
- Insurance
- Non-profit organizations

Earning Potential
Paralegal media salary: $57,356 per year


For more information contact 281-998-6150 ext. 7201 or ext. 7347.

Campus
North Campus

Information
The paralegal curriculum at San Jacinto Community College District is designed to provide students with the knowledge and skills required to work under the general direction of attorneys to assist them in the completion of legal tasks. The ABA approved program provides knowledge and skills for employment in law firms, courts, utility companies, title companies, trusts and mortgage departments of banks, government agencies, industrial companies and other legal departments. A paralegal may not provide legal services directly to the public unless specifically authorized by law.

Plan of Study
North Campus
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>Introduction to Law</td>
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<td>LGLA 1313</td>
<td>Introduction to Paralegal Studies</td>
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<td>PSYC 1300</td>
<td>Learning Framework</td>
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<td>Composition I</td>
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<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
<td>3</td>
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<td><strong>Credits</strong></td>
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<td><strong>Second Term</strong></td>
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<tr>
<td>LGLA 1301</td>
<td>Legal Research and Writing</td>
<td>3</td>
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<tr>
<td>LGLA 1345</td>
<td>Civil Litigation</td>
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<td>LGLA 1317</td>
<td>Law Office Technology</td>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
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<td>or MATH 1332</td>
<td>or Contemporary Mathematics (Quantitative Reasoning)</td>
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<td><strong>Credits</strong></td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>LGLA 1355</td>
<td>Family Law</td>
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<td>LGLA 2305</td>
<td>Interviewing and Investigating</td>
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<td>LGLA 1349</td>
<td>Constitutional Law</td>
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<tr>
<td>LGLA 2335</td>
<td>Advanced Civil Litigation</td>
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</table>

Total Credits: 60

External Learning Experience: LGLA 2380 Cooperative Education-Legal Assistant/Paralegal

Students must be TSI complete in order to graduate: Math level 8.

Real Estate Advanced, Level 2 Certificate

Program Information
Do you love exploring neighborhoods looking at “dream homes?” Are you a people person with strong relationship skills? If so, a career as a real estate agent may be for you. Real estate agents make an excellent living and enjoy a stimulating, fast-paced working environment. If negotiating deals and being in complete control over your success fits your personality and career dreams, then San Jacinto College is the perfect place to jumpstart your career!

The San Jacinto College real estate certificate program:
- Is designed to enable students to gain the knowledge and credentials necessary to take the salesperson’s licensure examination.
- Includes courses that provide for the annual renewal of the salesperson’s license and better equip the student to be successful in the highly competitive field of real estate.
• Bears the prestigious Exemplary Workforce Education Program rating from the Texas Education Coordinating Board and is taught by instructors who are experienced specialists.

**Additional Information**

All the courses in the certificate program also apply toward the associate of applied science degree.

The two-year program leading to an associate of applied science degree is for students who want to earn an associate degree while preparing for jobs in real estate and for sales or broker licensure.

Students pursuing a bachelor’s degree should see a counselor or the department chair prior to registration.

**Career Opportunities**

Students who pursue a certificate or degree in real estate seek employment in:

- Residential brokerage
- Commercial brokerage
- Property management
- Appraisal
- Apartment locating
- Mortgage lending
- Title services
- Inspection
- Government or corporate services

Students may also be self-employed in real estate consulting or full-time investing.

**Earning Potential**

Real Estate Broker median salary: $65,867 per year

Real Estate Sales Agent median salary: $60,945 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 713-894-9436

**Campuses**

Central Campus
North Campus
South Campus

**Information**

The Level 2 certificate allows the student to complete all the program specific courses in real estate. This would be beneficial for a student who is interested in pursuing a broker’s license or possible management opportunities in real estate. This will also help satisfy some continuing education requirements as well as completing a broader study in real estate. Achieving this certificate and completing the 15 credit hours of prescribed general education courses will allow the student to achieve the Real Estate Associates of Applied Science degree (A.A.S.).

**Admission**

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

**Plan of Study**

**All Campuses**

5REAL

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<tr>
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<tr>
<td>Law of Contracts</td>
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<tr>
<td>Principles of Real Estate II</td>
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<tr>
<td>Contract Forms and Addenda</td>
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<td>Real Estate Finance</td>
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<td>Law of Agency</td>
<td>3</td>
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<td>Business Computer Applications</td>
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<td>or Integrated Software Applications I</td>
<td>3</td>
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<td>Real Estate Appraisal</td>
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<td>Real Estate Marketing</td>
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<td>or Principles of Selling</td>
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<td>Real Estate Mathematics</td>
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<td>Real Estate Practicum I (or Field Experience)</td>
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<td>Business English</td>
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<td>or Business Communications</td>
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<td>Real Estate Investments</td>
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<td>or Property Management</td>
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<td>or Business Law</td>
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<td>Real Estate Brokerage</td>
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**Capstone Experience:** RELE 2367 Real Estate Practicum 2
Real Estate, Associate of Applied Science

Program Information
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- Includes courses that provide for the annual renewal of the salesperson’s license and better equip the student to be successful in the highly competitive field of real estate.
- Bears the prestigious Exemplary Workforce Education Program rating from the Texas Education Coordinating Board and is taught by instructors who are experienced specialists.

Additional Information
All the courses in the certificate program also apply toward the associate of applied science degree.

The two-year program leading to an associate of applied science degree is for students who want to earn an associate degree while preparing for jobs in real estate and for sales or broker licensure.

Students pursuing a bachelor's degree should see a counselor or the department chair prior to registration.

Career Opportunities
Students who pursue a certificate or degree in real estate seek employment in:

- Residential brokerage
- Commercial brokerage
- Property management
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- Inspection
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Students may also be self-employed in real estate consulting or full-time investing.

Earning Potential
Real Estate Broker median salary: $65,867 per year
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1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 713-894-9436

Campuses
Central Campus
North Campus
South Campus

Information
This two-year program leading to an associate of applied science degree in real estate is for students who want to earn a two-year degree while preparing for jobs in real estate and for sales or broker licensure. Students pursuing a bachelor’s degree should see a counselor or the department chair prior to registration.

Admission
No admission requirements.

Job entry requirements:
For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study
All Campuses

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<tr>
<th>Course</th>
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<td>RELE 1201</td>
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<td>RELE 1211</td>
<td>Law of Contracts</td>
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<td>RELE 1238</td>
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<td>RELE 1300</td>
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<td>RELE 1303</td>
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<td>RELE 1321</td>
<td>Real Estate Marketing</td>
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<td>or MRKG 2333</td>
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<td>RELE 1325</td>
<td>Real Estate Mathematics</td>
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San Jacinto College 2018-2019
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### Campuses

- Central Campus
- North Campus
- South Campus

### Information

The certificate of technology in Real Estate builds on the occupational certificate by including courses that provide for the annual renewal of the salesperson's license and better equip the student to be successful.
in the highly competitive field of real estate. All courses required for this certificate also apply toward the associate of applied science degree.

**Admission**

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

**Plan of Study**

All Campuses

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>RELE 1201</td>
<td>Principles of Real Estate I</td>
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<tr>
<td>RELE 1211</td>
<td>Law of Contracts</td>
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<tr>
<td>RELE 1238</td>
<td>Principles of Real Estate II</td>
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<td>RELE 1300</td>
<td>Contract Forms and Addenda</td>
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<td>RELE 1319</td>
<td>Real Estate Finance</td>
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<td>Business Computer Applications or Integrated Software Applications I</td>
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<tr>
<td>RELE 2366 or RELE 2367</td>
<td>Real Estate Practicum I or Real Estate Practicum 2</td>
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**Capstone Experience**: RELE 2366 Real Estate Practicum I or RELE 2367 Real Estate Practicum 2

**Approved Real Estate Electives**

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<td>RELE 1307</td>
<td>Real Estate Investments</td>
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<td>RELE 1325</td>
<td>Real Estate Mathematics</td>
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<td>RELE 2331</td>
<td>Real Estate Brokerage</td>
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<tr>
<td>RELE 1315 or RELE 1323</td>
<td>Property Management or Real Estate Computer Application</td>
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</table>

No course may be repeated for credit.

---

**Real Estate, Occupational Certificate**

Do you love exploring neighborhoods looking at “dream homes?” Are you a people person with strong relationship skills? If so, a career as a real estate agent may be for you. Real estate agents make an excellent living and enjoy a stimulating, fast-paced working environment. If negotiating deals and being in complete control over your success fits your personality and career dreams, then San Jacinto College is the perfect place to jumpstart your career!

The San Jacinto College real estate certificate program:

- Is designed to enable students to gain the knowledge and credentials necessary to take the salesperson’s licensure examination.
- Includes courses that provide for the annual renewal of the salesperson’s license and better equip the student to be successful in the highly competitive field of real estate.
- Bears the prestigious Exemplary Workforce Education Program rating from the Texas Education Coordinating Board and is taught by instructors who are experienced specialists.

**Additional Information**

All the courses in the certificate program also apply toward the associate of applied science degree.

The two-year program leading to an associate of applied science degree is for students who want to earn an associate degree while preparing for jobs in real estate and for sales or broker licensure.

Students pursuing a bachelor’s degree should see a counselor or the department chair prior to registration.

**Career Opportunities**

Students who pursue a certificate or degree in real estate seek employment in:

- Residential brokerage
- Commercial brokerage
- Property management
- Appraisal
- Apartment locating
- Mortgage lending
- Title services
- Inspection
- Government or corporate services
Students may also be self-employed in real estate consulting or full-time investing.

**Earning Potential**

- **Real Estate Broker** median salary: $65,867 per year 
- **Real Estate Sales Agent** median salary: $60,945 per year 

1. Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 713-894-9436

**Campuses**

- Central Campus
- North Campus
- South Campus

**Information**

This certificate is designed to enable students to gain the knowledge and credentials necessary to take the salesperson’s licensure examination. All the courses required for this certificate also apply toward the certificate of technology and the associate of applied science degree.

**Admission**

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

**Plan of Study**

**All Campuses**

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**Capstone Experience:** RELE 1300 Contract Forms and Addenda


**Educational Requirements for Texas Real Estate Licensure:** Requirements for licensure are subject to change by the Texas Real Estate Commission. Three semester credit hours are the equivalent of 45 clock or classroom hours. A real estate salesperson is required to complete a total of 18 semester (270 classroom) hours of education by the end of their first year of licensure. Courses acceptable toward sales educational requirements are also acceptable for broker educational requirements.

To be licensed as a broker under the educational requirements after Jan. 1, 2012, 18 semester hours (270 classroom hours) of the 60 semester hours (900 classroom hours) must be in core real estate courses. An applicant must have taken a real estate brokerage class.

Also, at least four years active experience in Texas as a licensed real estate salesperson are required.

For further information write or call:

The Texas Real Estate Commission
P.O. Box 12188
Capitol Station, Austin, TX 78711
512.465.3940

**Related Courses Acceptable Toward Broker Licensure** can be found on the TREC website www.trec.texas.gov (http://www.trec.texas.gov).
CONSTRUCTION, INDUSTRY, MANUFACTURING AND TRANSPORTATION

- Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Associate of Applied Science
- Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Level 2 Certificate
- Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Associate of Applied Science
- Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Level 2 Certificate of Technology
- Auto Tech, General Motors Automotive Service Educational Program (ASEP), Associate of Applied Science
- Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Associate of Applied Science Degree
- Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Level 2 Certificate
- Auto Tech, Mopar College Automotive Program (CAP), Associate of Applied Science
- Auto Tech, Mopar College Automotive Program (CAP), Level 2 Certificate of Technology
- Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Associate of Applied Science
- Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Level 2 Certificate
- Automotive Collision Repair Technology Management Specialty, Associate of Applied Science
- Automotive Collision Repair Technology Management Specialty, Certificate of Technology
- Automotive Collision Repair Technology, Associate of Applied Science
- Automotive Collision Repair, Certificate of Technology
- Automotive Collision, Automotive Painting Specialty, Occupational Certificate
- Automotive Collision, Non-Collision Repair, Certificate of Technology
- Automotive Collision, Repair Assistant, Occupational Certificate
- Biomedical Clinical Equipment Technician, Associate of Applied Science
- Biomedical Clinical Equipment Technician, Certificate of Technology
- Biomedical Clinical Equipment Technician, Level 2 Certificate
- Biomedical Clinical Equipment Technician, Occupational Certificate
- Construction Management Technology, Associate of Applied Science
- Construction Management, Certificate of Technology
- Electrical Technology Communications and Alternative Energy, Enhanced Skills Certificate
- Electrical Technology, Associate of Applied Science
- Electrical Technology, Certificate of Technology
- Electrical Technology, Enhanced Skills Certificate
- Electrical Technology, Level 2 Certificate
- Electrical Technology, Occupational Certificate
- Electronics Technology, Associate of Applied Science
- Electronics Technology, Certificate of Technology
- Electronics Technology, Level 2 Certificate
- Electronics Technology, Occupational Certificate
- Environmental Health and Safety Technology, Associate of Applied Science
- Environmental Health and Safety Technology, Certificate
- Heavy Diesel Power Specialty, Associate of Applied Science
- Heavy Diesel Power Specialty, Certificate of Technology
- Heavy Diesel Truck, Associate of Applied Science
- Heavy Diesel Truck, Certificate of Technology
- HVAC, Commercial Air Conditioning Technology, Associate of Applied Science
- HVAC, Commercial Air Conditioning Technology, Certificate of Technology
- HVAC, Commercial Air Conditioning Technology, Level 2 Certificate
- HVAC, Commercial Air Conditioning Technology, Occupational Certificate
- HVAC, Residential Air Conditioning Technology, Associate of Applied Science
- HVAC, Residential Air Conditioning Technology, Certificate of Technology
- HVAC, Residential Air Conditioning Technology, Occupational Certificate
- Instrumentation Technology, Associate of Applied Science
- Instrumentation Technology, Certificate of Technology
- Instrumentation Technology, Enhanced Skills Certificate
- Instrumentation Technology, Level 2 Certificate
- Maritime Transportation, Associate of Applied Science
- Maritime, Occupational Certificate
- NDT, Fixed Equipment Specialist, Enhanced Skills Certificate
- NDT, Nondestructive Testing Technology, Associate of Applied Science
- NDT, Nondestructive Testing Technology, Certificate of Technology
- NDT, Nondestructive Testing Technology, Level 2 Certificate
- NDT, Quality Analyst, Enhanced Skills Certificate
- NDT, Quality Assurance Technician, Occupational Certificate
- Pipefitting Technology, Occupational Certificate
- Process Technology Chemical Technician, Enhanced Skills Certificate
- Process Technology Power Technician, Enhanced Skills Certificate
- Process Technology, Associate of Applied Science
- Process Technology, Level 2 Certificate
- Welding Technology, Associate of Applied Science
- Welding Technology, Certificate of Technology
- Welding Technology, Level 2 Certificate
- Welding Technology, Occupational Certificate
- Welding Technology, Enhanced Skills Certificate
Auto Tech, Ford Automotive Student Education Training (ASSET) Program, Associate of Applied Science

Program Information

Are you looking to shift your career into high gear? If so, look no further than the Ford Automotive Service Student Education Training (ASSET) at San Jacinto College. Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you get the right training you need to excel in the ever-changing and always exciting field of automotive technology. Ford ASSET trains students to become successful service technicians certified in Ford service, diagnostic and repair methods.

The Ford ASSET program:

- Is recognized as the premier program in the global automotive industry for training and placement of new manufacturer-specific technicians.
- Is the primary source of new technicians trained and equipped with the basic knowledge, skills and experience to become successful and productive career professionals at the senior master level, while earning an associate degree.
- Provides tools, course materials and the opportunity to "Earn While You Learn" as students are also employed as dealer technicians while completing the program.
- Gives students the experience needed to prepare for the Automotive Service Excellence (ASE) exam.

Additional Information

Ford ASSET Certification and Training Areas:

- Gasoline engine performance
- Gasoline engine repair
- Steering and suspension
- Brake systems
- Electrical systems
- Climate control
- Manual transmissions and axles
- Automatic transmissions
- Diesel engine performance
- Diesel engine repair
- Gasoline Turbo Direct Injection (GTDI)

Career Opportunities

The Ford ASSET program prepares students for careers in dealerships as:

- Service technicians
- Parts counter persons
- Service writers
- Car sales personnel

Earning Potential

Automotive Service Technicians and Mechanics median salary: $44,042 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2016

For more information, please contact 281-476-1865.

Campus(es)

Central Campus

Information

Ford ASSET Program streamlines the path to becoming a highly trained automotive technician to less than two years. In the Ford ASSET Program you will alternate between San Jacinto College, a Ford ASSET College and hands-on work experience at your sponsoring dealership. Ford ASSET instructors are Ford trained and in touch with the latest automotive trends. You will be learning from the best. Learn how to identify, analyze and solve complex automotive problems. Theory and practical application will come together as you spend time working on actual customer vehicles. Ford Motor Company requires Ford ASSET instructors to have the latest high tech training available. Ford ASSET colleges are ready to provide the most current training available in the industry. As a Ford ASSET student you will complete between 80-100% of the Ford training required to become a Ford certified technician. The more you train, the more valuable you become as an employee. Ford Motor Company donates new vehicles to its Ford ASSET colleges. This ensures that you are training on the latest vehicle technology. If you are training on 10 year old vehicles your training is already 10 years out of date. All Ford ASSET Programs including San Jacinto College are accredited by the National Automotive Technicians Education Foundation (NATEF). This accreditation ensures that your training will meet or exceed industry standards. All Ford ASSET instructors must be certified by the National Institute for Automotive Service Excellence (ASE) before they are allowed to teach in any Ford ASSET classroom. Students interested in the Ford
ASSET program are required to meet with the ASSET coordinator or department chair before registering for automotive classes.

**Plan of Study**

**Central Campus**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<tr>
<td>AUMT 1407</td>
<td>Automotive Electrical Systems</td>
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<td>Automotive Electrical Diagnosis and Repair</td>
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<td>AUMT 1416</td>
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<td>Automotive Brake Systems</td>
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<td>Social and Behavioral Sciences</td>
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<td>Language, Philosophy, and Culture or Creative Arts</td>
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**Capstone Experience**: AUMT 2288 Internship - Automotive Technology

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

**Eligible for credentialing exam**

For automotive technology degree/certificate programs

**Note**: Applicants must meet the admission requirements for San Jacinto College and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).

**Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Level 2 Certificate**

Are you looking to shift your career into high gear? If so, look no further than the Ford Automotive Service Student Education Training (ASSET) at San Jacinto College. Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you get the right training you need to excel in the ever-changing and always exciting field of automotive technology. Ford ASSET trains students to become successful service technicians certified in Ford service, diagnostic and repair methods.

The Ford ASSET program:

- Is recognized as the premier program in the global automotive industry for training and placement of new manufacturer-specific technicians.
- Is the primary source of new technicians trained and equipped with the basic knowledge, skills and experience to become successful and productive career professionals at the senior master level, while earning an associate degree.
- Provides tools, course materials and the opportunity to “Earn While You Learn” as students are also employed as dealer technicians while completing the program.
- Gives students the experience needed to prepare for the Automotive Service Excellence (ASE) exam.

San Jacinto College 2018-2019
Additional Information
Ford ASSET Certification and Training Areas:

- Gasoline engine performance
- Gasoline engine repair
- Steering and suspension
- Brake systems
- Electrical systems
- Climate control
- Manual transmissions and axles
- Automatic transmissions
- Diesel engine performance
- Diesel engine repair
- Gasoline Turbo Direct Injection (GTDI)

Career Opportunities
The Ford ASSET program prepares students for careers in dealerships as:

- Service technicians
- Parts counter persons
- Service writers
- Car sales personnel

Earning Potential
Automotive Service Technicians and Mechanics median salary: $44,042 per year\(^1\)

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2016

For more information, please contact 281-476-1865.

Campus(es)
Central Campus

Information
The Ford ASSET Level 2 certificate prepares individuals for entry-level employment as automotive service technicians. San Jacinto College provides the training you need. Today's automobiles are equipped with multiple computers and extensive electronics. Servicing vehicles equipped with active suspension, satellite guidance systems and computer controlled, multi-valve engines requires highly specialized training. Upon the completion of this curriculum, students should be prepared to take the Automotive Service Excellence (ASE) Certification exams and be ready for full-time employment in the automotive service industry. Students interested in the Ford Level 2 Certificate program must meet with the ASSET coordinator or department chair before registering for automotive classes.

Plan of Study
Central Campus
5AUTO-F

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>Automotive Electrical Systems</td>
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<tr>
<td>AUMT 2421</td>
<td>Automotive Electrical Diagnosis and Repair</td>
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</table>

AUMT 2288 Internship - Automotive Technology 2

Second Term

AUMT 1416 Automotive Suspension and Steering 4
AUMT 1410 Automotive Brake Systems 4
AUMT 2188 Internship - Automotive Technology 1

Credits 9

Summer Year One Term

AUMT 1345 Automotive Climate Control Systems 3
AUMT 1319 Automotive Engine Repair 3

Credits 6

Third Term

AUMT 2288 Internship - Automotive Technology 2
AUMT 2417 Automotive Engine Performance Analysis I 4
AUMT 2434 Automotive Engine Performance Analysis II 4

Credits 10

Fourth Term

AUMT 2288 Internship - Automotive Technology 2
AUMT 2413 Manual Drivetrain and Axles 4
AUMT 2425 Automotive Automatic Transmission and Transaxles 4

Credits 10

Total Credits 45

Capstone Experience: AUMT 2288 Internship - Automotive Technology

Eligible for credentialing exam

For automotive technology degree/certificate programs

Note: Applicants must meet the admission requirements for San Jacinto College and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).
Auto Tech, Future Automotive Service Technicians (FAST) Program
Automotive Technology, Associate of Applied Science

Program Information
Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you will get the right training you need to excel in a career in automotive technology. You'll study the eight areas of Automotive Service Excellence (ASE), with the goal of passing the ASE national exam for each area. Once you pass the exams, you'll have several exciting career avenues to choose from, including service technician, parts counter, service advisor, shop foreman, service manager, and car sales—all areas that reward strong talent.

The San Jacinto College automotive technology program:

- Offers lectures and demonstrations, and practice lab skill sets, which prepare the student to take the national ASE certification exam;
- Teaches students the theory of operation, component identification, and diagnostic procedures while offering practice skill sets that apply to the concepts learned in the classroom setting; and
- Gives students hands-on experience needed to prepare for the ASE exam.

Career Opportunities
The San Jacinto College automotive technology program prepares students for careers in:

- DEALERSHIPS
- INDEPENDENT SERVICE SHOPS
- FRANCHISE REPAIR SHOPS
- EXHAUST SHOPS
- BRAKE SHOPS
- TIRE SPECIALTY SHOPS

Earning Potential
Automotive Service Technicians and Mechanics median salary: $41,705 per year

For more information, 281-998-6150 x 1150

Campus(es)
Central Campus

Information
The Automotive Technology Future Automotive Service Technicians (FAST) Program prepares individuals for employment as entry level Automotive Service Technicians. San Jacinto College can provide the training you need. Today's automobiles are equipped with multiple computers and extensive electronics. Servicing vehicles equipped with active suspension, satellite guidance systems and computer controlled, multi-valve engines requires highly specialized training. Upon the completion of this curriculum, students should be prepared to take the Automotive Service Excellence (ASE) Certification exams.

Plan of Study
Central Campus
3AUTO

<table>
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<th>Title</th>
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<td>AUMT 2421</td>
<td>Automotive Electrical Diagnosis and Repair</td>
<td>4</td>
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<tr>
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Summer Year One Term

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<td>ENGL 1301</td>
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Fourth Term

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<tr>
<td>AUMT 2413</td>
<td>Manual Drivetrain and Axles</td>
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<td>AUMT 2425</td>
<td>Automotive Automatic Transmission and Transaxles</td>
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<tr>
<td>Social and Behavioral Sciences</td>
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<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
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**Total Credits**: 60
Capstone Experience: AUMT 2289 Internship Automotive Technology

Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

Eligible for credentialing exams

† For automotive technology degree/certificate programs

Note: Applicants must meet the admission requirements for SJC and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).

Auto Tech, Future Automotive Service Technicians (FAST) Program
Automotive Technology, Level 2 Certificate of Technology

Program Information
Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you will get the right training you need to excel in a career in automotive technology. You’ll study the eight areas of Automotive Service Excellence (ASE), with the goal of passing the ASE national exam for each area. Once you pass the exams, you’ll have several exciting career avenues to choose from, including service technician, parts counter, service advisor, shop foreman, service manager, and car sales—all areas that reward strong talent.

The San Jacinto College automotive technology program:
• Offers lectures and demonstrations, and practice lab skill sets, which prepare the student to take the national ASE certification exam;
• Teaches students the theory of operation, component identification, and diagnostic procedures while offering practice skill sets that apply to the concepts learned in the classroom setting; and
• Gives students hands-on experience needed to prepare for the ASE exam.

Career Opportunities

The San Jacinto College automotive technology program prepares students for careers in:
• Dealerships
• Independent service shops
• Franchise repair shops
• Exhaust shops
• Brake shops
• Tire specialty shops

Earning Potential

Automotive Service Technicians and Mechanics median salary: $41,705 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, 281-998-6150 x 1150

Campus(es)
Central Campus

Information

The Automotive Technology Future Automotive Service Technicians (FAST) Program prepares individuals for employment as Automotive Service Technicians. San Jacinto College can provide the training you need. Today's automobiles are equipped with multiple computers and extensive electronics. Servicing vehicles equipped with active suspension, satellite guidance systems and computer controlled, multi-valve engines requires highly specialized training. Upon the completion of this curriculum, students should be prepared to take the Automotive Service Excellence (ASE) Certification exams and be ready for full-time employment in the automotive service industry. Students interested in the Automotive Technology FAST Level 2 Certificate Program must meet with the FAST coordinator or department chair before registering for automotive classes.

Plan of Study

Central Campus
5AUTO

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>Automotive Brake Systems</td>
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Auto Tech, General Motors Automotive Service Educational Program (ASEP), Associate of Applied Science

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**Summer Year One Term**

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**Third Term**

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<td>AUMT 2417</td>
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<td>Automotive Automatic Transmission and Transaxles</td>
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</table>

**Total Credits** | **45**

**Capstone Experience:** AUMT 2289 Internship Automotive Technology

Eligible for credentialing exams

† For automotive technology degree/certificate programs

**Note:** Applicants must meet the admission requirements for San Jacinto College and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).

---

**Program Information**

Are you looking to shift your career into high gear? Look no further than the General Motors (GM) Automotive Service Education Program (ASEP) at San Jacinto College. Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. With GM being the world’s largest automotive manufacturer, you have access to the latest equipment and technology. At San Jacinto College, you can get the right training you need to excel in the ever-changing and always exciting field of automotive technology. As you learn about and work with cars from the world’s largest automotive manufacturer, you will have access to the latest equipment and technology.

The GM Automotive Service Education Program:

- Offers hands-on training to learn the automotive fundamentals for GM vehicles;
- Provides tools, course materials, and the opportunity to Earn While You Learn as students are also employed as dealer technicians while completing the program;
- Gives students experience needed to prepare for the Automotive Service Excellence exam; and
- Provides scholarships and tuition assistance available to those that qualify.

**Career Opportunities**

The GM ASEP prepares students for careers in dealerships as:

- Service technicians
- Parts counter persons
- Service writers
- Car salesperson
- Service manager

San Jacinto College 2018-2019
Earning Potential

Automotive Service Technicians and Mechanics median salary: $47,259 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-998-6150 x 1535

Campus(es)
Central Campus

Information

GM ASEP streamlines the path to becoming a highly trained automotive technician to less than two years. In GM ASEP you will alternate between San Jacinto College, a GM ASEP College, and hands-on work experience at your sponsoring dealership. GM ASEP instructors are GM trained and in touch with the latest automotive trends. You will learn from the best. Learn how to identify, analyze and solve complex automotive problems. Theory and practical application will come together as you spend time working on actual customer vehicles. General Motors requires GM ASEP instructors to have the latest high tech training available. GM ASEP colleges are ready to provide the most current training available in the industry. As a GM ASEP student you will complete between 80-100 percent of the GM training required to become a GM certified technician. The more you train, the more valuable you become as an employee. GM donates new vehicles to its GM ASEP colleges. This ensures that you are training on the latest vehicle technology. If you are training on 10-year-old vehicles your training is 10 years out of date. All GM ASEP programs including San Jacinto College are accredited by the National Automotive Technicians Education Foundation (NATEF). This accreditation ensures that your training will meet or exceed industry standards. All GM ASEP instructors must be certified by the National Institute for Automotive Service Excellence before they are allowed to teach in any GM ASEP classroom. In fact, many of these instructors have gone on to achieve GM World Class status, the highest achievement for a GM technician. You deserve to be trained by the best. Students interested in the GM ASEP program are required to meet with the ASEP coordinator or department chair before registering for automotive classes.

Plan of Study

Central Campus
3AUTO-G

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td></td>
<td><strong>First Term</strong></td>
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<td>AUMT 1407</td>
<td>Automotive Electrical Systems</td>
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<td>AUMT 2421</td>
<td>Automotive Electrical Diagnosis and Repair</td>
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<td>AUMT 2288</td>
<td>Internship - Automotive Technology</td>
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<td>Speech</td>
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<td><strong>Second Term</strong></td>
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<td>AUMT 1419</td>
<td>Automotive Engine Repair</td>
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<td>Automotive Brake Systems</td>
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Capstone Experience: AUMT 2288 Internship - Automotive Technology

Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

Eligible for credentialing exam

For automotive technology degree/certificate programs

Note: Applicants must meet the admission requirements for San Jacinto College and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).
Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Associate of Applied Science Degree

Program Information

Are you looking to shift your career into high gear? Look no further than the Honda Professional Automotive Career Training program at San Jacinto College Professional Automotive Career Training (PACT). Automobiles are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you will get the right training on Honda and Acura vehicles to excel in the ever-changing and always exciting field of automotive technology. The Honda PACT program opens students to several exciting career avenues, including service technician, parts counter, service writer, shop foreman, service manager and car sales — all areas that reward strong talent.

The Honda PACT program:

• Offers hands-on training to learn the automotive fundamentals for Honda and Acura vehicles.
• Provides the opportunity to “Earn While You Learn” as students are also employed as dealer technicians while completing the program.
• Gives students experience needed to prepare for the Automotive Service Excellence (ASE) exam.

Career Opportunities

The Automotive Technology Honda PACT program prepares students for careers in dealerships as:

• Service advisors
• Service technicians
• Parts counter persons
• Service writers
• Car salesperson

Earning Potential

Earning potential varies widely, depending on work ethic, experience, certifications, and dealer work flow.

For more information, contact 281-998-6150 x 1137

Central Campus

Information

Honda PACT streamlines the path to becoming a highly trained automotive technician to less than two years. In Honda PACT you will alternate between San Jacinto College, a Honda PACT College and hands-on work experience at your sponsoring dealership. Honda PACT instructors are Honda trained and in touch with the latest automotive trends. You will be learning from the best. Learn how to identify, analyze and solve complex automotive problems. Theory and practical application will come together as you spend time working on actual customer vehicles. American Honda Motor Co. Inc. requires Honda PACT instructors to have the latest high tech training available. Honda PACT colleges are ready to provide the most current training available in the industry. As a Honda PACT student you will complete between 80-100% of the Honda training required to become a Honda certified technician. The more you train, the more valuable you become as an employee. American Honda Motor Co. Inc. donates new vehicles to its Honda PACT colleges. This ensures that you are training on the latest vehicle technology. If you are training on 10 year old vehicles your training is already 10 years out of date. All Honda PACT Programs including San Jacinto College are accredited by the National Automotive Technicians Education Foundation (NATEF). This accreditation ensures that your training will meet or exceed industry standards. All Honda PACT instructors must be certified by the National Institute for Automotive Service Excellence (ASE) before they are allowed to teach in any Honda PACT classroom. You deserve to be trained by the best. Students interested in the Honda PACT program are required to meet with the PACT coordinator or department chair before registering for automotive classes.

Plan of Study

Central Campus

3AUTO-H

First Term

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<tr>
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<td>Automotive Suspension and Steering</td>
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<td>Speech</td>
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Second Term

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<td>Automotive Electrical Diagnosis and Repair</td>
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<td>AUMT 2188</td>
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<td>Social and Behavioral Sciences</td>
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San Jacinto College 2018-2019
### Summer Year One Term

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### Third Term

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<tr>
<td>AUMT 2417</td>
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<td>MATH 1332</td>
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<td>or MATH 1314</td>
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**Total Credits:** **60**

1 Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

**Capstone Experience:** AUMT 2289 Internship Automotive Technology

**Eligible for credentialing exams**

† For automotive technology degree/certificate programs

**Note:** Applicants must meet the admission requirements for SJC and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).

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### Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Level 2 Certificate

Am you looking to shift your career into high gear? Look no further than the Honda Professional Automotive Career Training program at San Jacinto College Professional Automotive Career Training (PACT). Automobiles are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you will get the right training on Honda and Acura vehicles to excel in the ever-changing and always exciting field of automotive technology. The Honda PACT program opens students to several exciting career avenues, including service technician, parts counter, service writer, shop foreman, service manager and car sales – all areas that reward strong talent.

The Honda PACT program:

- Offers hands-on training to learn the automotive fundamentals for Honda and Acura vehicles.
- Provides the opportunity to “Earn While You Learn” as students are also employed as dealer technicians while completing the program.
- Gives students experience needed to prepare for the Automotive Service Excellence (ASE) exam.

### Career Opportunities

The Automotive Technology Honda PACT program prepares students for careers in dealerships as:

- Service advisors
- Service technicians
- Parts counter persons
- Service writers
- Car salesperson

### Earning Potential

Earning potential varies widely, depending on work ethic, experience, certifications, and dealer work flow.
Campus(es)
Central Campus

Information

The Honda PACT Level 2 certificate is designed to teach technical competence and professional level skills to incoming technicians. The curriculum has been co-designed by Honda and San Jacinto College. San Jacinto College can provide the training you need. The program requires the student to work at a Honda or Acura dealership as well as attend San Jacinto College classroom and laboratory classes, where the student will work on Honda and Acura donated training vehicles. Upon the completion of this curriculum, students should be prepared to take the Automotive Service Excellence (ASE) Certification exams and be ready for full-time employment in the automotive service industry. San Jacinto College is accredited by the National Automotive Technicians Education Foundation (NATEF). This accreditation ensures that your training will meet or exceed industry standards. Students interested in the Honda Level 2 Certificate Program must meet with the PACT coordinator or department chair before registering for automotive classes.

Plan of Study
Central Campus
5AUTO-H

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<td>Automotive Engine Performance Analysis II</td>
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Capstone Experience: AUMT 2289 Internship Automotive Technology

Eligible for credentialing exam

† For automotive technology degree/certificate programs

Note: Applicants must meet the admission requirements for SJC and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

Exceptions must be approved in writing by the department chair.

Students are required to furnish their own tools. (See a program instructor, program coordinator or the department chair for required tool list).

Program Information

Are you looking to shift your career into high gear? If so, look no further than the MOPAR CAP Chrysler automotive technology program at San Jacinto College. Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you will get the right training on a variety of makes to excel in the ever-changing and always exciting field of automotive technology. The MOPAR CAP Chrysler program opens students to several exciting career avenues, including service technician, parts counter, service writer, shop foreman, service manager, and car sales—all areas that reward strong talent.

The MOPAR CAP Chrysler automotive technology program:

- Offers hands-on training to learn the automotive fundamentals for Chrysler vehicles including Dodge, Jeep, Ram, and Fiat;
- Provides course materials, and the opportunity to Earn While You Learn as students are also employed as dealer technicians while completing the program;
• Allows students to earn credits in the Chrysler Academy Technical Training Curriculum;
• Gives students experience needed to prepare for the Automotive Service Excellence exam;
• Trains in diesel repair; and
• Provides training manuals at no cost to students, for a savings of up to $480.

Career Opportunities

The Automotive Technology MOPAR CAP Chrysler program prepares students for careers in dealerships as:

• Service technicians
• Parts counter persons
• Service writers
• Car salesmen

Earning Potential

Automotive Service Technicians and Mechanics median salary: $47,259 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 1521.

Campus(es)

Central Campus

Information

Mopar College Automotive Program (CAP) streamlines the path to becoming a highly trained automotive technician to less than two years. In Mopar CAP you will alternate between San Jacinto College, a Mopar CAP College and hands-on work experience at your sponsoring dealership. Mopar CAP instructors are Mopar Group LLC trained and in touch with the latest automotive trends. You will learn from the best. Learn how to identify, analyze and solve complex automotive problems. Theory and practical application will come together as you spend time working on actual customer vehicles. Mopar Group LLC requires Mopar CAP instructors to have the latest high-tech training available. Mopar CAP colleges are ready to provide the most current training available in the industry. As a Mopar CAP student, you will complete between 80-100 percent of the Mopar training required to become a Mopar, Jeep and Ram certified technician. The more you train, the more valuable you become as an employee. Mopar Group LLC donates new vehicles to its Mopar CAP colleges. This ensures that you are training on the latest vehicle technology. If you are training on 10-year-old vehicles your training is 10 years out of date. All Mopar CAP programs including San Jacinto College are accredited by the National Automotive Technicians Education Foundation (NATEF). This accreditation ensures that your training will meet or exceed industry standards. All Mopar CAP instructors must be certified by the National Institute for Automotive Service Excellence (ASE) before they are allowed to teach in any Mopar CAP classroom. You deserve to be trained by the best. Students interested in the Mopar CAP program are required to meet with the CAP coordinator or department chair before registering for automotive classes.

Plan of Study

Central Campus

3AUTO-C

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<tr>
<th>Course</th>
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Capstone Experience: AUMT 2288 Internship - Automotive Technology

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Note: Applicants must meet the admission requirements for SJC and achieve minimum scores on assessments for mechanical comprehension and reading.
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Auto Tech, Mopar College Automotive Program (CAP), Level 2 Certificate of Technology

Program Information

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1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 1521.

Campus(es)

Central Campus

Information

The Mopar CAP Level 2 certificate prepares individuals for entry level employment as automotive service technicians. San Jacinto College can provide the training you need. Today's automobiles are equipped with multiple computers and extensive electronics. Servicing vehicles equipped with active suspension, satellite guidance systems and computer controlled, multi-valve engines require highly specialized training. Upon the completion of this curriculum, students should be prepared to take the Automotive Service Excellence (ASE) Certification exams and be ready for full-time employment in the automotive service industry. Students interested in the Mopar CAP Level 2 Certificate Program must meet with the CAP coordinator or department chair before registering for automotive classes.

Plan of Study

Central Campus

5AUTO-C

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Program Information

Are you looking to shift your career into high gear? Look no further than the Toyota Technician Training & Education Network (T-TEN) at San Jacinto College. Cars and trucks are much more complex than they used to be, increasingly relying on complicated computer systems and electronics for operation. At San Jacinto College, you can get the right training you need to excel in the ever-changing and always exciting field of automotive technology. Our T-Ten program strives to ensure student success, create seamless transition opportunities, and enrich the quality of life in the community we serve.

The T-TEN program at San Jacinto College:

- Is a partnership between Toyota, San Jacinto College, and the local Toyota and Lexus dealerships. It is recognized as a premier program in the global automotive industry for training and placement of factory trained technicians for the Toyota and Lexus dealerships;
- Is focused on training and developing quality technicians who are in demand by combining classroom study and hands-on dealership experience. Upon graduation from the T-TEN program, the student will receive an Associate of Applied Science (AAS) degree or Level 2 Certificate, ASE Certifications, and Toyota Factory Training certifications;
- Offers students hands-on high-tech training on late model Toyota and Lexus vehicles in a state-of-the-art facility. Students will also get discounts on professional tools, obtain air conditioning licenses and be well prepared for ASE certifications; and
- Helps aspiring technicians get the training they need to begin an interesting and rewarding career quickly.

Program Acceptance Requirements

Admission to the T-TEN program requires:

- Valid Texas driver’s license;
- Valid Social Security number or work permit;
- Clean driving record;
- Clean criminal background record;
- Clean drug test;
- Bennett Mechanical Comprehension Assessment; and
- Entrance interview with the program coordinator.

Career Opportunities

The T-TEN program prepares students for an exciting career in Toyota or Lexus dealerships as Factory Certified Toyota/Lexus Technicians. Students will begin working as entry-level service technicians while on internships with the opportunity to work full time after graduation. T-TEN graduates thrive in a high-paying career working on some of the leading vehicles in the country.

Salary varies based on certifications and experience.

For more information, contact 281-998-6150 x 1137

Campus(es)

Central Campus

Toyota Technician & Education Network Program (T-TEN)

Toyota Technical and Education Network (T-TEN) streamlines the path to becoming a highly trained automotive technician to less than two years. In Toyota T-TEN you will alternate between San Jacinto College, a Toyota T-TEN College and hands-on work experience at your sponsoring dealership. Toyota T-TEN instructors are Toyota trained and in touch with the latest automotive trends. You will be learning from the best. Learn how to identify, analyze and solve complex automotive problems. Theory and practical application will come together as you spend time working on actual customer vehicles. Toyota Motor Sales, U.S.A., Inc.
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**Plan of Study**

**Central Campus**  
3AUTO-TTEN

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**Capstone Experience:** AUMT 2288 Internship - Automotive Technology

\(^1\) Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

**Eligible for credentialing exam**

\(†\) For automotive technology degree/certificate programs:

**Note:** Applicants must meet the admission requirements for SJC and achieve minimum scores on assessments for mechanical comprehension and reading.

All new students are required to attend automotive orientation.

Department-specific courses must be taken in sequence and may have a prerequisite course.

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**Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Level 2 Certificate**

**Program Information**

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- Valid Texas driver’s license;
- Valid Social Security number or work permit;
- Clean driving record;
- Clean criminal background record;
- Bennett Mechanical Comprehension Assessment; and
- Entrance interview with the program coordinator.

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Salary varies based on certifications and experience.

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**Campus(es)**

Central Campus

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**Plan of Study**

**Central Campus**

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**Capstone Experience:** AUMT 2288 Internship - Automotive Technology

**Eligible for credentialing exam**
Automotive Collision Repair Technology Management Specialty, Associate of Applied Science

Program Information
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At San Jacinto College, students may also choose to specialize in auto painting, auto repair assistant, auto collision repair management, and auto non-collision repair technology.

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- Parts technicians: new, aftermarket and used
- Insurance estimators
- Collision office employees
- Custom body work/custom paint/air brushes

Earning Potential
Automotive Body and Related Repairers median salary: $36,531

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-459-7242 or email Gail.Mason@sjcd.edu.

Campus
North Campus

Plan of Study
North Campus
3ABCR-MGT

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San Jacinto College

ABDR 1323 or ABDR 2380
Front and Rear Wheel Alignment
or Cooperative Education - Autobody/Collision and Repair Technology

ABDR 2502
Auto Body Mechanical and Electrical Service

ABDR 2257
Collision Shop Management

Credits
3
5
2
19

Total Credits
60

Capstone Experience: ABDR 2257 Collision Shop Management

Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

Automotive Collision Repair Technology Management Specialty, Certificate of Technology

Program Information
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Campus
North Campus

Plan of Study
North Campus
4ABCR-MGT

Course
ABDR 1307
ABDR 1519
ABDR 1431
ABDR 1303
ABDR 2541
ABDR 1441
ABDR 2353
ABDR 1315

Title
Collision Repair Welding
Basic Metal Repair
Basic Refinishing
Vehicle Design and Structural Analysis
Major Collision Repair and Panel Replacement
Structural Analysis and Damage Report I
Color Analysis and Paint Matching
Vehicle Trim and Hardware

Credits
3
5
4
3
5
4
3
3

Credits
15
15

San Jacinto College 2018-2019
Automotive Collision Repair Technology, Associate of Applied Science

Third Term

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Capstone Experience: ABDR 2257 Collision Shop Management

Program Information

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Campus

North Campus

Information

Collision repair is a skilled craft, which involves repairing collision-damaged motor vehicles through straightening frames, removing dents, welding torn metal, replacing damaged parts, spot repairing and overall refinishing. Emphasis is placed on repairing late model vehicles.

Plan of Study

North Campus

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Campus
North Campus

Plan of Study
North Campus
4ABCR-CR
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**Capstone Experience:** ABDR 2380 Cooperative Education - Autobody/Collision and Repair Technology or ABDR 1323 Front and Rear Wheel Alignment

### Automotive Collision, Automotive Painting Specialty, Occupational Certificate

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### Campus

North Campus

### Plan of Study

North Campus

6ACRT-PNT
### Program Information

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Capstone Experience: ABDR 2549 Advanced Refinishing
Automotive Collision, Repair Assistant, Occupational Certificate

Program Information
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<td>ABDR 2541</td>
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Biomedical Clinical Equipment Technician, Associate of Applied Science

Program Information
Are you a hands-on kind of person with a technical mind? If so, San Jacinto College’s biomedical equipment technology program might be the path for you. Biomedical clinical equipment technicians are essential...
to the medical field. Technicians must have the skills necessary to repair and replace, test and calibrate, and perform preventative maintenance. They must also facilitate training sessions on medical equipment such as patient monitors, defibrillators, medical imaging equipment, and more.

The San Jacinto College biomedical clinical equipment technician program:

• Provides quality training in computer and electronics technology in today's medical equipment operation and repair;
• Offers an occupational certificate that will start to build a foundation for developing an understanding in medical equipment and computer and electronics operation and repair; and
• Teaches students skills necessary to repair and replace parts on medical equipment, test and calibrate equipment, perform and record preventative maintenance, procure and track inventory, and facilitate training sessions on the equipment.

Career Opportunities

Professionals with an associate degree and at least two years of work experience can become a certified Biomedical Equipment Technician (CBET) through the Association for the Advancement of Medical Instrumentation (AAMI).

Earning Potential

Medical Equipment Repairer Median Salary: $43,588 per year

Source: texaswages.com, Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 3587

Campus(es)

South Campus

Information

The Biomedical Clinical Equipment Technician curriculum is designed to provide basic training for students to enter and/or advance in the occupations associated with medical equipment maintenance and repair. A Biomedical Equipment Technician must possess the skills necessary to repair and replace parts on medical equipment, test and calibrate equipment, perform and record preventative maintenance, procure and track inventory and facilitate training sessions on the equipment. A graduate in this program will gain the theoretical knowledge needed to understand the equipment as well as the practical (hands-on) skills to operate and repair the equipment. Employment of medical equipment repairers is projected to grow 31 percent from 2010 to 2020, much faster than the average for all occupations. Greater demand for health care services and the use of increasingly complex medical equipment will drive this employment growth. Those who have associate degrees in biomedical equipment technology should have the best job opportunities. Biomedical equipment repair technicians are most commonly employed by hospitals or clinics, private companies and the military. Biomedical equipment repair technicians must be able to interact with health care professionals, administrators, patients and vendors to perform their jobs. Although some medical equipment repairers are trained to fix a variety of equipment, others specialize in repairing one or a small number of machines. For less complicated equipment, such as electric hospital beds, workers make repairs as needed. You can become a Certified Biomedical Equipment Repair Technician (CBET) through the Association for the Advancement of Medical Instrumentation (AAMI) by sitting for the exam administered by the International Certification Commission (ICC). Additional credentials are also offered by the AAMI. Eligibility requirements vary depending on your level of education and work experience. Once you have completed an associate degree in Biomedical Equipment Repair Technology and gained two years of work experience in the field, you are eligible for certification.

As with most technology, advances in medical equipment are constantly evolving. Because of this, you are required to complete continuing education activities in order to keep your skills and equipment knowledge up to date.

The student that begins the program in the occupational certificate will start to build a foundation for developing an understanding in medical equipment, computer, and electronics operation and repair. The next two certificates (certificate of technology and the level 2 certificate) build upon these foundation classes with more specialized biomedical equipment classes to provide the student with more theoretical and practical industry expertise and the chance for an internship. All of these certificates are stackable and lead directly to the associate of applied science. Some students with previous biomedical equipment repair experience can enter the workplace with the certificates while students with no previous experience are directed to complete the associate of applied science degree.

Plan of Study

South Campus

3BIOMD-CET

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<thead>
<tr>
<th>Course</th>
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<td>BIOM 1309</td>
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<td>Safety in Health Care Facilities</td>
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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>Fundamentals of Networking Technologies</td>
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<td>ITSC 1309 or BCIS 1305</td>
<td>Integrated Software Applications I or Business Computer Applications</td>
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<td>Medical Circuits Troubleshooting</td>
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<td>Diagnostic Ultrasound Imaging Systems</td>
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<td>BIOM 1355</td>
<td>Medical Electronic Applications</td>
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<td>BIOM 2311</td>
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<td>BIOM 2319</td>
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<td>BIOM 2315</td>
<td>Physiological Instruments I</td>
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<td>ENGL 1301</td>
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Contemporary Mathematics (Quantitative Reasoning) 3

**Total Credits** 12

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**Program Information**

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**Biomedical Clinical Equipment Technician, Certificate of Technology**

**Social and Behavioral Sciences**

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<tr>
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<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td>MATH 1314</td>
<td>College Algebra</td>
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<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
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<td>Life and Physical Sciences (Lec &amp; Lab)</td>
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**Fourth Term**

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<tr>
<td>Speech</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td>Select one of the following:</td>
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<td>Life and Physical Sciences (Lec &amp; Lab)</td>
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</table>

**Capstone Experience:** BIOM 2343 General Medical Equipment II

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**Career Opportunities**

Professionals with an associate degree and at least two years of work experience can become a certified Biomedical Equipment Technician (CBET) through the Association for the Advancement of Medical Instrumentation (AAMI).

**Earning Potential**

Medical Equipment Repairer Median Salary: $43,588 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 3587

**Campus(es)**

South Campus

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Plan of Study
South Campus
4BIOMD-CET

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<td>or BCIS 1305</td>
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<td>BIOM 1315</td>
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<td>BIOM 1341</td>
<td>Medical Circuits Troubleshooting</td>
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<tr>
<td>BIOM 1350</td>
<td>Diagnostic Ultrasound Imaging Systems</td>
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Capstone Experience: BIOM 2389 Internship - Biomedical Technology/ Technician

Biomedical Clinical Equipment Technician, Level 2 Certificate

Program Information
Are you a hands-on kind of person with a technical mind? If so, San Jacinto College’s biomedical equipment technology program might be the path for you. Biomedical clinical equipment technicians are essential to the medical field. Technicians must have the skills necessary to repair and replace, test and calibrate, and perform preventative maintenance. They must also facilitate training sessions on medical equipment such as patient monitors, defibrillators, medical imaging equipment, and more.

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Career Opportunities
Professionals with an associate degree and at least two years of work experience can become a certified Biomedical Equipment Technician (CBET) through the Association for the Advancement of Medical Instrumentation (AAMI).

Earning Potential
Medical Equipment Repairer Median Salary: $43,588 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 3587

Campus(es)
South Campus

Information
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San Jacinto College 2018-2019
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### Plan of Study

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<td>BIOM 1309</td>
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<td>Safety in Health Care Facilities</td>
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<td>Electricity Principles</td>
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<td>Integrated Software Applications I</td>
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Capstone Experience: BIOM 2343 General Medical Equipment II

### Biomedical Clinical Equipment Technician, Occupational Certificate

#### Program Information

Are you a hands-on kind of person with a technical mind? If so, San Jacinto College’s biomedical equipment technology program might be the path for you. Biomedical clinical equipment technicians are essential to the medical field. Technicians must have the skills necessary to repair and replace, test and calibrate, and perform preventative maintenance. They must also facilitate training sessions on medical equipment such as patient monitors, defibrillators, medical imaging equipment, and more.

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### Career Opportunities

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Medical Equipment Repairer Median Salary: $43,588 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 x 3587

### Campus(es)

South Campus
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Plan of Study

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6BIOMD-CET

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<td>ITNW 1325</td>
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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<td>or BCIS 1305</td>
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</table>

Credits 15
Total Credits 15

Capstone Experience: BIOM 2301 Safety in Health Care Facilities

Construction Management Technology, Associate of Applied Science

Program Information

Were you born with a take-charge attitude and a passion for building? Are you a natural-born leader with an interest in commercial and industrial planning? If so, then a career in construction management may be the right path for you.

The San Jacinto College construction management program:

- Is designed to prepare graduates in the field of commercial and industrial construction management. Graduates will assist in the planning, direction, and coordination of activities concerned with the construction and maintenance of commercial and industrial structures and facilities;
- Allows students to participate in the conceptual development and organization of a construction project, pricing and procurement, cost scheduling, and the overseeing of its organization, estimating, scheduling, and the implementation of the project; and
- Offers courses covering material familiarization, specialized construction fields such as civil, carpentry, mechanical, piping and plumbing systems, electrical/electronic, building envelopes, legal contracts, codes, permit processes, and state identities with an understanding of the green elements of each.

Career Opportunities

Graduates of San Jacinto College’s construction management program have the opportunity to work as:

- Project manager
- Superintendent
• Estimator
• Assistant project manager
• Assistant superintendent
• Project engineer
• Field engineer
• Safety engineer

As Houston continues to grow, the construction management job outlook remains positive. The Gulf Coast area is expected to add an estimated 1,970 construction manager positions annually through 2022.\(^1\)

\(^1\) Source: U.S. Bureau of Labor Statistics

### Earning Potential

Construction manager median salary: $96,195 per year\(^1\)

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017.

For more information, please contact 281-998-6150 ext. 7765.

### Campus

#### North Campus

### Information

The purpose of the construction management program is to prepare graduates in the field of commercial and industrial construction management. Graduates will assist in the planning, direction and coordination of activities concerned with the construction and maintenance of commercial and industrial structures and facilities. They will participate in the conceptual development and organization of a construction project, pricing and procurement, scheduling and overseeing of its organization, estimating and the implementation of the project. This includes material familiarization; specialized construction fields such as civil, carpentry, mechanical and piping and plumbing systems; electrical/electronic; building envelopes; legal contracts; codes; and permit processes through state and local identities with an understanding of the green elements of each.

The program will also prepare students to sit for the Occupational Health and Safety Administration (OSHA) 10-hour certification exam and the U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) Green Associate Certification Exam.

### Plan of Study

#### North Campus

3CSTR-MGMT

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<td>CNBT 2440</td>
<td>Mechanical, Plumbing and Electrical Systems in Construction II</td>
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<td>CNBT 1442</td>
<td>Building Codes and Inspections</td>
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<td>CNBT 2366 or CNBT 2344</td>
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<td>BMGT 1301</td>
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### Capstone Experience: CNBT 2366 Practicum-Construction Technology or CNBT 2344 Construction Management II

\(^1\) Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

San Jacinto College 2018-2019
Program Information

Were you born with a take-charge attitude and a passion for building? Are you a natural-born leader with an interest in commercial and industrial planning? If so, then a career in construction management may be the right path for you.

The San Jacinto College construction management program:

- Is designed to prepare graduates in the field of commercial and industrial construction management. Graduates will assist in the planning, direction, and coordination of activities concerned with the construction and maintenance of commercial and industrial structures and facilities;
- Allows students to participate in the conceptual development and organization of a construction project, pricing and procurement, cost scheduling, and the overseeing of its organization, estimating, scheduling, and the implementation of the project; and
- Offers courses covering material familiarization, specialized construction fields such as civil, carpentry, mechanical, piping and plumbing systems, electrical/electronic, building envelopes, legal contracts, codes, permit processes, and state identities with an understanding of the green elements of each.

Career Opportunities

Graduates of San Jacinto College’s construction management program have the opportunity to work as:

- Project manager
- Superintendent
- Estimator
- Assistant project manager
- Assistant superintendent
- Project engineer
- Field engineer
- Safety engineer

As Houston continues to grow, the construction management job outlook remains positive. The Gulf Coast area is expected to add an estimated 1,970 construction manager positions annually through 2022.\(^1\)

\(^1\) Source: U.S. Bureau of Labor Statistics

Earning Potential

Construction manager median salary: $96,195 per year\(^1\)

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017.

For more information, please contact 281-998-6150 ext. 7765.

Campus

North Campus

Information

The purpose of the construction management program is to prepare graduates in the field of commercial and industrial construction management. They will participate in the conceptual development and organization of a construction project, pricing and procurement, scheduling and overseeing of its organization, estimating and the implementation of the project. This includes material familiarization; specialized construction fields such as civil, carpentry, mechanical and piping and plumbing systems; electrical/electronic; building envelopes; legal contracts; codes; and permit processes through state and local identities with an understanding of the green elements of each.

The program will also prepare students to sit for the Occupational Health and Safety Administration (OSHA) 10-hour certification exam and the U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) Green Associate Certification Exam.

Plan of Study

North Campus

4CSTR-MGMT

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<th>Course</th>
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<tr>
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</tr>
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<td>Construction Methods &amp; Materials I</td>
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<td>Commercial/Industrial Blueprint Reading</td>
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Capstone Experience: CNBT 2366 Practicum-Construction Technology or CNBT 2344 Construction Management II
Electrical Technology Communications and Alternative Energy, Enhanced Skills Certificate

Program Information
Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College’s electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area’s petrochemical plants and business infrastructure.

The San Jacinto College electrical technology program:
- Uses a curriculum that prepares students to fill entry-level positions in residential, commercial, and industrial electrical fields;
- Prepares students for jobs in maintenance, design, marketing, estimating, and other electrical-related industries;
- Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
- Prepares students for journeyman and master electrical exams.

Additional Information
The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

Career Opportunities
According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:
- Supervisors
- Project managers
- Construction superintendents
- Estimators
- Electrical inspectors
- Electrical contractors
- Master electrician

Earning Potential
Electrician median salary: $54,599 per year


For more information, please contact Central Campus, 281-478-2712; or North Campus, 281-998-6150, ext. 7346.

Campuses
Central Campus
North Campus

Information
The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

Enhanced Skills Certificate
The enhanced skills certificate in electrical technology communications and alternative energy is designed for students who have completed the Electrical Technology Associate of Applied Science.

Plan of Study
Central and North Campuses
EELEC-CAE
Please see Electrical Technology, Associate of Applied Science (p. 89) page for more information.

<table>
<thead>
<tr>
<th>Course</th>
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Electrical Technology, Associate of Applied Science

San Jacinto College 2018-2019
Program Information
Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College's electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area's petrochemical plants and business infrastructure.

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• Construction superintendents
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• Electrical inspectors
• Electrical contractors
• Master electrician

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Electrician median salary: $54,599 per year

Information
The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

Plan of Study
Central and North Campuses
3ELEC

Course Title Credits
First Term
ELPT 1215 Electrical Calculations I 2
CETT 1302 Electricity Principles 3
ELPT 1325 National Electric Code I 3
ELPT 1429 Residential Wiring 4
ENGL 1301 Composition I 3
Credits 15

Second Term
ELPT 1345 Commercial Wiring 3
ELPT 1351 Electrical Machines 3
ELPT 1441 Motor Control 4
ELPT 2215 Electrical Calculations II 2
MATH 1332 or MATH 1314 Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra 3
Credits 15

Summer Year One Term
ELPT 2325 National Electrical Code II 3
Credits 3

Third Term
ELPT 2343 Electrical System Design 3
ELPT 1357 Industrial Wiring 3
ELPT 2305 Transformers and Motors 3
ELPT 2337 Electrical Planning and Estimating 3
Social and Behavioral Sciences 1 3
Credits 15

Fourth Term
ELPT 2319 Programmable Logic Controllers I 3

ELPT 2301 or ELPT 2364 Journeyman Electrician Exam Review or Practicum-Electrical and Power Transmission Installation/Installer, General 3

Speech 3
Language, Philosophy, and Culture or Creative Arts 1 3
Credits 12

Total Credits 60

Capstone Experience: ELPT 2301 Journeyman Electrician Exam Review or ELPT 2364 Practicum-Electrical and Power Transmission Installation/Installer, General


For more information, please contact Central Campus, 281-478-2712; or North Campus, 281-998-6150, ext. 7346.

Campuses
Central Campus
North Campus
Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

Electrical Technology, Certificate of Technology

Program Information

Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College’s electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area’s petrochemical plants and business infrastructure.

The San Jacinto College electrical technology program:

- Uses a curriculum that prepares students to fill entry-level positions in residential, commercial, and industrial electrical fields;
- Prepares students for jobs in maintenance, design, marketing, estimating, and other electrical-related industries;
- Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
- Prepares students for journeyman and master electrical exams.

Additional Information

The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

Career Opportunities

According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:

- Supervisors
- Project managers
- Construction superintendents
- Estimators
- Electrical inspectors
- Electrical contractors
- Master electrician

Earning Potential

Electrician median salary: $54,599 per year


For more information, please contact Central Campus, 281-478-2712; or North Campus, 281-998-6150, ext. 7346.

Campuses

Central Campus
North Campus

Information

The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

Plan of Study

Central and North Campuses
4ELEC-TEC

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<tr>
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<td>ELPT 1351</td>
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<td>Motor Control</td>
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<td>ELPT 1357</td>
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<td>ELPT 2301 or ELPT 2364</td>
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San Jacinto College 2018-2019
**Capstone Experience:** ELPT 2301 Journeyman Electrician Exam Review or ELPT 2364 Practicum-Electrical and Power Transmission Installation/Installer, General

**Electrical Technology, Enhanced Skills Certificate**

**Program Information**

Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College’s electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area's petrochemical plants and business infrastructure.

The San Jacinto College electrical technology program:

- Uses a curriculum that prepares students to fill entry-level positions in residential, commercial, and industrial electrical fields;
- Prepares students for jobs in maintenance, design, marketing, estimating, and other electrical-related industries;
- Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
- Prepares students for journeyman and master electrical exams.

**Additional Information**

The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

**Career Opportunities**

According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:

- Supervisors
- Project managers
- Construction superintendents
- Estimators
- Electrical inspectors

**Earning Potential**

Electrician median salary: $54,599 per year


For more information, please contact Central Campus, 281-478-2712; or North Campus, 281-998-6150, ext. 7346.

**Campuses**

Central Campus
North Campus

**Information**

The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

**Enhanced Skills Certificate**

The enhanced skills certificate in Electrical Technology is designed for students who have completed the Electrical Technology Associate of Applied Science Degree.

**Plan of Study**

Central and North Campuses
ELEC

Please see Electrical Technology, Associate of Applied Science (p. 89) page for more information.

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**Electrical Technology, Level 2 Certificate**
Program Information
Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College’s electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area’s petrochemical plants and business infrastructure.

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• Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
• Prepares students for journeyman and master electrical exams.

Additional Information
The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

Career Opportunities
According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:
• Supervisors
• Project managers
• Construction superintendents
• Estimators
• Electrical inspectors
• Electrical contractors
• Master electrician

Earning Potential
Electrician median salary: $54,599 per year

Information
The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

Plan of Study
Central and North Campuses
5ELEC-TEC

Course Title Credits
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First Term
ELPT 1215 Electrical Calculations I 2
CETT 1302 Electricity Principles 3
ELPT 1325 National Electric Code I 3
ELPT 1429 Residential Wiring 4
ELPT 1345 Commercial Wiring 3
Credits 15

Second Term
ELPT 1351 Electrical Machines 3
ELPT 1441 Motor Control 4
ELPT 2215 Electrical Calculations II 2
ELPT 2305 Transformers and Motors 3
ELPT 2337 Electrical Planning and Estimating 3
Credits 15

Summer Year One Term
ELPT 2325 National Electrical Code II 3
Credits 3

Third Term
ELPT 2343 Electrical System Design 3
ELPT 2319 Programmable Logic Controllers I 3
ELPT 1357 Industrial Wiring 3
ELPT 2301 or ELPT 2364 Journeyman Electrician Exam Review or Practicum-Electrical and Power Transmission Installation/Installer, General 3
Credits 12

Total Credits 45

Capstone Experience: ELPT 2301 Journeyman Electrician Exam Review or ELPT 2364 Practicum-Electrical and Power Transmission Installation/Installer, General

Campuses
Central Campus
North Campus

San Jacinto College 2018-2019
Electrical Technology, Occupational Certificate

Program Information
Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College’s electrical technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area’s petrochemical plants and business infrastructure.

The San Jacinto College electrical technology program:

• Uses a curriculum that prepares students to fill entry-level positions in residential, commercial, and industrial electrical fields;
• Prepares students for jobs in maintenance, design, marketing, estimating, and other electrical-related industries;
• Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
• Prepares students for journeyman and master electrical exams.

Additional Information
The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

Career Opportunities
According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:

• Supervisors
• Project managers
• Construction superintendents
• Estimators
• Electrical inspectors
• Electrical contractors
• Master electrician

Earning Potential
Electrician median salary: $54,599 per year


For more information, please contact Central Campus, 281-478-2712; or North Campus, 281-998-6150, ext. 7346.

Campuses
Central Campus
North Campus

Information
The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

Plan of Study
Central and North Campuses
6ELEC-TEC

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tr>
<td>First Term</td>
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<tr>
<td>ELPT 1215</td>
<td>Electrical Calculations I</td>
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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>ELPT 1325</td>
<td>National Electric Code I</td>
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<td>ELPT 1345</td>
<td>Commercial Wiring</td>
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<td>ELPT 1429</td>
<td>Residential Wiring</td>
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</table>

Capstone Experience: ELPT 1345 Commercial Wiring

Electronics Technology, Associate of Applied Science

Program Information
Has anyone ever called you tech-savvy? Are you passionate about technology? Do you find it thrilling that our computers, communications, databases, security systems, personal and corporate connectivity, and information networks are all intricately intertwined into a finely woven
net that envelops the planet? If so, a degree in electronics technology is right for you. The San Jacinto College electronics technology program prepares you to work in electronics, industrial computing, VOIP switching, phone PBX, and a variety of other computer-related fields. With technology moving faster than ever, one thing is for certain: If you know computer electronics, your skills are in high demand!

The San Jacinto College computer electronics technology curriculum provides:

- Basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors, and computer engineering technology;
- A great foundation in the principles of electronics with an emphasis on digital electronics and computers; and
- A great training ground in advanced microprocessor applications and basic automation and robotics.

Additional Information

Graduates of this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications, and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

Career Opportunities

With an associate degree in electronics technology, students can expect the following job opportunities:

- Electronics technicians
- Field engineers
- Support specialists
- Medical equipment repair and calibration technicians
- Oilfield electronics technicians
- Computer networking technicians
- Entertainment equipment repair technicians
- Simulator repair technicians

Earning Potential

Electrical and electronics engineering technician median salary: $62,968 per year

Source: texasswages.com (http://texasswages.com), Gulf Coast region, 2017

For more information please contact 281-998-6150 ext. 1870.

Campuses

Central Campus

Information

The applied computer electronics technology curriculum is designed to provide basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors and computer engineering technology. A graduate of this program will have a good foundation in the principles of electronics with an emphasis on digital electronics and computers. The program provides training in advanced microprocessor applications and basic automation and robotics.

Graduates from this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

Plan of Study

Central Campus

3ELECTRON

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CETT 1303</td>
<td>DC Circuits</td>
<td>3</td>
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<tr>
<td>CETT 1305</td>
<td>AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CETT 1349</td>
<td>Digital Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
<td>3</td>
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<td></td>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>CETT 1329</td>
<td>Solid State Devices</td>
<td>3</td>
</tr>
<tr>
<td>CETT 1357</td>
<td>Linear Integrated Circuits</td>
<td>3</td>
</tr>
<tr>
<td>RBTC 1355</td>
<td>Sensors and Automation</td>
<td>3</td>
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<tr>
<td>EELT 2337</td>
<td>Electronic Troubleshooting Service and Repair</td>
<td>3</td>
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<tr>
<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
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<td><strong>Credits</strong></td>
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<tr>
<td>FCEL 1305</td>
<td>Fuel Cell and Alternative/Renewable Energy</td>
<td>3</td>
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<tr>
<td>EECT 2339</td>
<td>Communications Circuits</td>
<td>3</td>
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<td>EELT 1305</td>
<td>Basic Fluid Power</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td><strong>Credits</strong></td>
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<tr>
<td>ELMT 2335 or EECT 2367</td>
<td>Certified Electronics Technician or Practicum, (Field Experience) Electronic Technology/Technician</td>
<td>3</td>
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<td>Social and Behavioral Sciences 2</td>
<td>3</td>
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<td>Speech</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
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</table>

Capstone Experience: ELMT 2335 Certified Electronics Technician Training, EELT 2337 Electronic Troubleshooting Service and Repair or EECT 2367 Practicum, (Field Experience) Electronic Technology/Technician

Students planning to pursue a baccalaureate degree should enroll in MATH 1314 College Algebra.
Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

### Approved Electronics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tr>
<td>EECT 2367</td>
<td>Practicum, (Field Experience) Electronic Technology/Technician</td>
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<tr>
<td>ELMT 2333</td>
<td>Industrial Electronics</td>
<td>3</td>
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<tr>
<td>ELMT 2335</td>
<td>Certified Electronics Technician Training</td>
<td>3</td>
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<tr>
<td>ELMT 2341</td>
<td>Electromechanical Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electronics Technology, Certificate of Technology

**Program Information**

Has anyone ever called you tech-savvy? Are you passionate about technology? Do you find it thrilling that our computers, communications, databases, security systems, personal and corporate connectivity, and information networks are all intricately intertwined into a finely woven net that envelops the planet? If so, a degree in electronics technology is right for you. The San Jacinto College electronics technology program prepares you to work in electronics, industrial computing, VOIP switching, phone PBX, and a variety of other computer-related fields. With technology moving faster than ever, one thing is for certain: If you know computer electronics, your skills are in high demand!

The San Jacinto College computer electronics technology curriculum provides:

- Basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors, and computer engineering technology;
- A great foundation in the principles of electronics with an emphasis on digital electronics and computers; and
- A great training ground in advanced microprocessor applications and basic automation and robotics.

### Additional Information

Graduates of this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications, and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

### Career Opportunities

With an associate degree in electronics technology, students can expect the following job opportunities:

- Electronics technicians
- Field engineers
- Support specialists
- Medical equipment repair and calibration technicians
- Oilfield electronics technicians
- Computer networking technicians
- Entertainment equipment repair technicians
- Simulator repair technicians

### Earning Potential

Electrical and electronics engineering technician median salary: $62,968 per year

1. Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information please contact 281-998-6150 ext. 1870.

### Campuses

Central Campus

### Information

The applied computer electronics technology curriculum is designed to provide basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors and computer engineering technology. A graduate of this program will have a good foundation in the principles of electronics with an emphasis on digital electronics and computers. The program provides training in advanced microprocessor applications and basic automation and robotics.

Graduates from this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

### Certificate of Technology

The Certificate of Technology in Electronics Technology satisfies the basic technical requirements for a technician in support of electronics installation, fabrication and troubleshooting associated with communications and embedded electronics applications. The student will design, build and troubleshoot basic analog and digital circuits, as well as interface these circuits to systems using microprocessors and micro controllers.

### Plan of Study

#### Central Campus

**4 ELECTRON**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>CETT 1303</td>
<td>DC Circuits</td>
<td>3</td>
</tr>
</tbody>
</table>
Electronics Technology, Level 2 Certificate

Program Information

Has anyone ever called you tech-savvy? Are you passionate about technology? Do you find it thrilling that our computers, communications, databases, security systems, personal and corporate connectivity, and information networks are all intricately intertwined into a finely woven net that envelops the planet? If so, a degree in electronics technology is right for you. The San Jacinto College electronics technology program prepares you to work in electronics, industrial computing, VOIP switching, phone PBX, and a variety of other computer-related fields. With technology moving faster than ever, one thing is for certain: If you know computer electronics, your skills are in high demand!

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- A great foundation in the principles of electronics with an emphasis on digital electronics and computers; and
- A great training ground in advanced microprocessor applications and basic automation and robotics.

Additional Information

Graduates of this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications, and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

Career Opportunities

With an associate degree in electronics technology, students can expect the following job opportunities:

- Electronics technicians
- Field engineers
- Support specialists
- Medical equipment repair and calibration technicians
- Oilfield electronics technicians
- Computer networking technicians
- Entertainment equipment repair technicians
- Simulator repair technicians

Earning Potential

Electrical and electronics engineering technician median salary: $62,968 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information please contact 281-998-6150 ext. 1870.

Campuses

Central Campus

Information

The applied computer electronics technology curriculum is designed to provide basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors and computer engineering technology. A graduate of this program will have a good foundation in the principles of electronics with an emphasis on digital electronics and computers. The program provides training in advanced microprocessor applications and basic automation and robotics.

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Plan of Study

Central Campus

5ELEC

<table>
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<tr>
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<tr>
<td>CETT 1303</td>
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<td>CETT 1305</td>
<td>AC Circuits</td>
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<tr>
<td>CETT 1325</td>
<td>Digital Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CETT 1349</td>
<td>Digital Systems</td>
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</tr>
<tr>
<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
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Credits 15
San Jacinto College

Second Term

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<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>CETT 1329</td>
<td>Solid State Devices</td>
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</tr>
<tr>
<td>CETT 1357</td>
<td>Linear Integrated Circuits</td>
<td>3</td>
</tr>
<tr>
<td>RBTC 1355</td>
<td>Sensors and Automation</td>
<td>3</td>
</tr>
<tr>
<td>ELMT 2337</td>
<td>Electronic Troubleshooting Service</td>
<td>3</td>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) 1 or College Algebra</td>
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Credits 15

Third Term

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<th>Course Code</th>
<th>Title</th>
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<tr>
<td>FCEL 1305</td>
<td>Fuel Cell and Alternative/Renewable Energy</td>
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<td>EECT 2339</td>
<td>Communications Circuits</td>
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<td>ELMT 1305</td>
<td>Basic Fluid Power</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>ELMT 2335</td>
<td>Certified Electronics Technician Training or Practicum, (Field Experience)</td>
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<tr>
<td>or EECT 2367</td>
<td>Electronic Technology/Technician</td>
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Approved Elective (p. 97) 3

Credits 18

Total Credits 48

Capstone Experience: ELMT 2337 Electronic Troubleshooting Service and Repair, or ELMT 2335 Certified Electronics Technician Training or Practicum, (Field Experience) Electronic Technology/Technician

1 Students planning to pursue a baccalaureate degree should enroll in MATH 1314 College Algebra.

Approved Electives

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<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
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<td>ELMT 2333</td>
<td>Industrial Electronics</td>
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<td>ELMT 2341</td>
<td>Electromechanical Systems</td>
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</tbody>
</table>

Electronics Technology, Occupational Certificate

Program Information

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Career Opportunities

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- Electronics technicians
- Field engineers
- Support specialists
- Medical equipment repair and calibration technicians
- Oilfield electronics technicians
- Computer networking technicians
- Entertainment equipment repair technicians
- Simulator repair technicians

Earning Potential

Electrical and electronics engineering technician median salary: $62,968 per year\(^1\)

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information please contact 281-998-6150 ext. 1870.

Campuses

Central Campus

Information

The applied computer electronics technology curriculum is designed to provide basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors and computer engineering technology. A graduate of this program will have a good foundation in the principles of electronics with an emphasis on digital electronics and computers. The program provides training in advanced microprocessor applications and basic automation and robotics.
Graduates from this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

**Occupational Certificate**

The student in electronics communication technology builds an understanding of basic analog and digital communication circuits used in radio and telephone systems. The student will be able to apply techniques for installing and troubleshooting these systems to the fields associated with radio, telephone, data-relay and other communications systems.

**Plan of Study**

Central Campus

<table>
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<tr>
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<td>AC Circuits</td>
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<td>CETT 1349</td>
<td>Digital Systems</td>
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<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
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<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Environmental Health and Safety Technology, Associate of Applied Science**

- Is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical, and health sciences disciplines, as well as a thorough introduction to occupational health and safety concepts;
- Trains students to recognize common occupational safety concerns that deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, compliance with safety standards, environmental protection; and other areas; and
- Prepares students to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss control data to individuals on a need-to-know basis; and measure and evaluate the effectiveness of accident and loss-control systems.

**Additional Information**

Our curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). The ABIH and BCSP began a jointly sponsored certification program through The Council on Certification of Health, Environmental, and Safety Technologists (CCHEST). CCHEST will administer the testing. Students who pass the certification examination and pay the required fees are authorized to use the title Environmental Health and Safety Technologist, and to use the initials OHST after their names. Students may further their studies at a university leading toward Certified Safety Professional and/or Certified Industrial Hygienist.

**Career Opportunities**

An environmental health and safety manager heads the modern safety and health team. Depending on the size of the company and the commitment of its management, the teams include positions for:

- Safety/Environmental Specialist
- Safety/Environmental Engineer
- Industrial Hygienist
- Risk Management Specialist
- Health Physicist
- Occupational Physician
- Occupational Health Nurse

The job of the environmental health and safety manager is complex and diverse focusing on analysis, prevention, planning, evaluation, promotion, and compliance. Educational requirements range from technical certificates to graduate degrees. Additional college majors held by practitioners include environmental science, occupational and environmental health and safety, industrial safety and health technology, industrial technology, industrial engineering technology, manufacturing technology, industrial management, and engineering technology.

**Earning Potential**

Occupational Health and Safety Technician median salary: $48,043 per year.¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-476-1501 ext. 1348.
Campus
Central Campus

Information
Environmental Health & Safety Technology (EHST) is a specialized branch of the health professions focusing on the environment of workers. Professionals in this field strive to find and eliminate conditions in the workplace that may result in occupational injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The Environmental Health & Safety Technology program is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical, and health sciences, as well as a thorough introduction to occupational health and safety concepts. Common occupational safety concerns deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, and compliance with safety standards, environmental protection, and other areas. Environmental health and safety personnel are expected to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss control data to individuals on a need-to-know basis; and measure and evaluate the effectiveness of accident and loss control systems.

The curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). Students who complete the AAS degree in EHST may qualify to begin the examination process to eventually become a Certified Safety Professional (CSP) through the BCSP. Students may also complete course work at a number of upper-level universities leading toward additional certifications such as the Certified Industrial Hygienist (CIH) through the ABIH, the Certified Environmental Professional (CEP) through the National Association of Environmental Professionals (NAEP), the Certified Risk Manager (CRM) through the National Alliance for Insurance Education and Research (NAIER), and many others.

Program Entry
EHST candidates (new or returning) must attend a mandatory EHST program orientation before being allowed to register for program related courses (does not apply to academic courses). Fall entry (August) orientations are held between November and December. No new students will be allowed to enter the EHST program during the summer. Please contact the Public Safety and Security Department for upcoming orientation dates at 281.998.6150, ext. 3686.

Plan of Study
Central Campus
3ENVR-HLTH

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>EPCT 1307</td>
<td>Introduction to Environmental Safety and Health</td>
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<tr>
<td>OSHT 1309</td>
<td>Physical Hazards Control</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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</table>

| Second Term        |                                          |         |
| OSHT 1313          | Accident Prevention, Inspection and Investigation | 3       |
| OSHT 2320          | Safety Training Presentation Techniques   | 3       |
| ENGL 2311          | Technical and Business Writing            | 3       |

| Third Term         |                                          |         |
| EPCT 1341          | Principles of Industrial Hygiene          | 3       |
| OSHT 2305          | Ergonomics and Human Factors in Safety    | 3       |
| OSHT 1307          | Construction Site Safety and Health       | 3       |
| ENGL 2311          | Technical and Business Writing            | 3       |

| Fourth Term        |                                          |         |
| EPCT 2333          | Environmental Toxicology                  | 3       |
| OSHT 2401          | OSHA Regulations-General Industry         | 4       |
| OSHT 2309          | Safety Program Management                 | 3       |
| Approved Elective  |                                          |         |
| ENGL 2311          | Technical and Business Writing            | 3       |
| Social and Behavioral Sciences  |                                          | 3       |

Total Credits: 60

Capstone Experience: OSHT 2309 Safety Program Management

1 Students desiring to obtain a baccalaureate degree should take CHEM 1312 General Chemistry II (lecture)/CHEM 1112 General Chemistry II (lab).

2 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.

Approved Electives

<table>
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<tr>
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<th>Title</th>
<th>Credits</th>
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<td>EMSP 1160 &amp; EMSP 1501</td>
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<tr>
<td>EPCT 1301</td>
<td>Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics</td>
<td>3</td>
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<tr>
<td>EPCT 1305</td>
<td>Environmental Regulations Overview</td>
<td>3</td>
</tr>
<tr>
<td>EPCT 1311</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>EPCT 1313</td>
<td>Contingency Planning</td>
<td>3</td>
</tr>
<tr>
<td>OSHT 1321</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
Environmental Health and Safety Technology, Certificate

Program Information

Is safety your number one priority? Are you analytical, cautious, and efficient? If so, a career in environmental health and safety technology may be the right path for you. This is a specialized branch of the health profession that focuses on the environment of workers. Environmental health and safety professionals strive to find and eliminate conditions in the workplace that may result in injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The San Jacinto College environmental health and safety technology program:

- Is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical, and health sciences disciplines, as well as a thorough introduction to occupational health and safety concepts;
- Trains students to recognize common occupational safety concerns that deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, compliance with safety standards, environmental protection; and other areas; and
- Prepares students to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss control data to individuals on a need-to-know basis; and measure and evaluate the effectiveness of accident and loss-control systems.

Additional Information

Our curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). The ABIH and BCSP began a jointly sponsored certification program through The Council on Certification of Health, Environmental, and Safety Technologists (CCHEST). CCHEST will administer the testing. Students who pass the certification examination and pay the required fees are authorized to use the title Environmental Health and Safety Technologist, and to use the initials OHST after their names. Students may further their studies at a university leading toward Certified Safety Professional and/or Certified Industrial Hygienist.

Career Opportunities

An environmental health and safety manager heads the modern safety and health team. Depending on the size of the company and the commitment of its management, the teams include positions for:

- Safety/Environmental Specialist
- Safety/Environmental Engineer
- Industrial Hygienist
- Risk Management Specialist
- Health Physicist
- Occupational Physician
- Occupational Health Nurse

The job of the environmental health and safety manager is complex and diverse focusing on analysis, prevention, planning, evaluation, promotion, and compliance. Educational requirements range from technical certificates to graduate degrees. Additional college majors held by practitioners include environmental science, occupational and environmental health and safety, industrial safety and health technology, industrial technology, industrial engineering technology, manufacturing technology, industrial management, and engineering technology.

Earning Potential

Occupational Health and Safety Technician median salary: $48,043 per year.¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-476-1501 ext. 1348.

Campus

Central Campus

Information

Environmental Health & Safety Technology (EHST) is a specialized branch of the health professions focusing on the environment of workers. Professionals in this field strive to find and eliminate conditions in the workplace that may result in occupational injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The Environmental Health & Safety Technology program is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical, and health sciences, as well as a thorough introduction to occupational health and safety concepts. Common occupational safety concerns deal with safety hazards involved with confined space entry, hazardous energy control, hazard communication, and compliance with safety standards, environmental protection, and other areas. Environmental health and safety personnel are expected to perform the following functions: identify and analyze accident and loss-producing conditions; develop accident prevention and loss control methods, procedures, and programs; communicate accidents and loss control data to individuals on a need-to-know basis;
and measure and evaluate the effectiveness of accident and loss control systems.

The curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). Students who complete the AAS degree in EHST may qualify to begin the examination process to eventually become a Certified Safety Professional (CSP) through the BCSP. Students may also complete course work at a number of upper-level universities leading toward additional certifications such as the Certified Industrial Hygienist (CIH) through the ABIH, the Certified Environmental Professional (CEP) through the National Association of Environmental Professionals (NAEP), the Certified Risk Manager (CRM) through the National Alliance for Insurance Education and Research (NAIER), and many others.

Program Entry

EHST candidates (new or returning) must attend a mandatory EHST program orientation before being allowed to register for program related courses (does not apply to academic courses). Fall entry (August) orientations are held between April and May. Spring entry (January) orientations are held between November and December. No new students will be allowed to enter the EHST program during the summer. Please contact the Public Safety and Security Department for upcoming orientation dates at 281.998.6150, ext. 3686.

Plan of Study

Central Campus
5ENV-RHLTH

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>EPCT 1307</td>
<td>Introduction to Environmental Safety and Health</td>
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<td>OSHT 1309</td>
<td>Physical Hazards Control</td>
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<td>Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics</td>
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<td>Construction Site Safety and Health</td>
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<td>EPCT 1311</td>
<td>Introduction to Environmental Science</td>
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<td>Second Term</td>
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<tr>
<td>OSHT 1313</td>
<td>Accident Prevention, Inspection and Investigation</td>
</tr>
<tr>
<td>OSHT 2309</td>
<td>Safety Program Management</td>
</tr>
<tr>
<td>OSHT 2320</td>
<td>Safety Training Presentation Techniques</td>
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<tr>
<td>OSHT 2401</td>
<td>OSHA Regulations-General Industry</td>
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<tr>
<td>EPCT 1305</td>
<td>Environmental Regulations Overview</td>
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<td>Major Elective (p. 101)</td>
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<td><strong>Total Credits</strong></td>
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Capstone Experience: OSHT 2309 Safety Program Management

Approved Electives

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<th>Title</th>
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<td>EMSP 1501</td>
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<td>&amp; EMSP 1160</td>
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<tr>
<td>EPCT 1313</td>
<td>Contingency Planning</td>
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</tbody>
</table>

Both courses are required if used to satisfy the elective requirement for Environmental Health and Safety Technology and must be taken concurrently.

Heavy Diesel Power Specialty, Associate of Applied Science

Program Information

The diesel technology department at San Jacinto College is committed to teaching students this technology at industry level, while maintaining a close relationship with the diesel industry. We assist students with career options and job placement opportunities. The most important focus of this department is students and their knowledge acquisition.

The San Jacinto College diesel technology program:

- Is committed to teaching students technology at industry level, while maintaining a close relationship with the diesel industry;
- Teaches engine testing and repair, electrical systems, HVAC, power train, brake systems, safety, and more; and
- Offers an associate degree program that provides students the business background needed to open doors on the corporate and management sides of the industry.

Career Opportunities

Careers in diesel technology are at an all-time high. Most of our students are hired before graduation. Many students are recruited by companies and organizations such as:

- Cummins
- Stewart & Stevenson
- City of Houston
- Penske Corporation
- Houston area truck dealers

Earning Potential

Bus & Truck Mechanics & Diesel Engine Specialists median salary: $47,925 per year.\(^1\)

For more information, please contact 281-998-6150 ext. 7343.

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
### Campus

**North Campus**

### Information

The heavy diesel power associate of applied science degree provides a course of study designed to prepare the student for a career with a leader in specialized Power Generators/Generation. This Industry sponsored program offers training in the repair and maintenance of diesel engines and power generators; including load banks, transformers, and power coupling stations. Incorporated into the program is the repair and maintenance of air conditioners, chillers, and the theory of the refrigeration cycle and temperature/pressure control metering devices. An emphasis on academic essentials and industry soft skills will set the associate of applied science degree student apart from certificate students. Students interested in this award must secure department chair approval before registering for classes.

### Plan of Study

**North Campus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>DEMR 1301</td>
<td>Shop Safety and Procedures</td>
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<td>DEMR 1306</td>
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<td>DEMR 1405</td>
<td>Basic Electrical Systems</td>
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<td>DEMR 1410</td>
<td>Diesel Engine Testing and Repair I</td>
<td>4</td>
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<tr>
<td>Second Term</td>
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<tr>
<td>DEMR 1413</td>
<td>Fuel Systems</td>
<td>4</td>
</tr>
<tr>
<td>DEMR 1423</td>
<td>Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair</td>
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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>HART 1407</td>
<td>Refrigeration Principles</td>
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<td>ELM 2453</td>
<td>Power Generation Troubleshooting</td>
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<td>ELPT 1341</td>
<td>Motor Control</td>
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<td>Fourth Term</td>
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<td>or College Algebra</td>
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<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
<td>3</td>
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<tr>
<td>or ENGL 1302</td>
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<td>or Composition II</td>
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<td>Social and Behavioral Sciences 2</td>
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<td>Language, Philosophy, and Culture or Creative Arts 2</td>
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<td>Speech</td>
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</tr>
</tbody>
</table>

1. DEMR 1229 Preventative Maintenance is offered as a substitute course for DEMR 2266 Field Experience-Diesel Mechanics, if jobs are not available.
2. Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

### Program Information

The diesel technology department at San Jacinto College is committed to teaching students this technology at industry level, while maintaining a close relationship with the diesel industry. We assist students with career options and job placement opportunities. The most important focus of this department is students and their knowledge acquisition.

The San Jacinto College diesel technology program:

- Is committed to teaching students technology at industry level, while maintaining a close relationship with the diesel industry;
- Teaches engine testing and repair, electrical systems, HVAC, power train, brake systems, safety, and more; and
- Offers an associate degree program that provides students the business background needed to open doors on the corporate and management sides of the industry.

### Career Opportunities

Careers in diesel technology are at an all-time high. Most of our students are hired before graduation. Many students are recruited by companies and organizations such as:

- Cummins
- Stewart & Stevenson
- City of Houston
- Penske Corporation
- Houston area truck dealers

### Earning Potential

Bus & Truck Mechanics & Diesel Engine Specialists median salary: $47,925 per year

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San Jacinto College 2018-2019
Heavy Diesel Truck, Associate of Applied Science

Program Information
The diesel technology department at San Jacinto College is committed to teaching students this technology at industry level, while maintaining a close relationship with the diesel industry. We assist students with career options and job placement opportunities. The most important focus of this department is students and their knowledge acquisition.

The San Jacinto College diesel technology program:
• Is committed to teaching students technology at industry level, while maintaining a close relationship with the diesel industry;
• Teaches engine testing and repair, electrical systems, HVAC, power train, brake systems, safety, and more; and
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Career Opportunities
Careers in diesel technology are at an all-time high. Most of our students are hired before graduation. Many students are recruited by companies and organizations such as:
• Cummins
• Stewart & Stevenson
• City of Houston
• Penske Corporation
• Houston area truck dealers

Earning Potential
Bus & Truck Mechanics & Diesel Engine Specialists median salary:
$47,925 per year

For more information, please contact 281-998-6150 ext. 7343.

Campus
North Campus

Associate of Applied Science Degree
The heavy diesel truck associate of applied science degree will prepare students for a career in the repair and maintenance of diesel engines.
with a focus on engines for over-the-road heavy duty diesel trucks. Topics of study will include: repair and maintenance, transmissions, fuel systems, brakes, and differentials. The state of Texas hires more diesel technicians than any other state with strong ties to the Port of Houston and the greater gulf coast petrochemical industry. An emphasis on academic essentials and industry soft skills will set the associate of applied science degree student apart from certificate students.

Plan of Study
North Campus
3DESL-HTR

<table>
<thead>
<tr>
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<tr>
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<td>DEMR 1301</td>
<td>Shop Safety and Procedures</td>
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<td>DEMR 1423</td>
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<td>Third Term</td>
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<tr>
<td>DEMR 1421</td>
<td>Power Train I</td>
<td>4</td>
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<tr>
<td>DEMR 2334</td>
<td>Advanced Diesel Tune-up and Troubleshooting</td>
<td>3</td>
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<td>DEMR 2412</td>
<td>Diesel Engine Testing and Repair II</td>
<td>4</td>
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<tr>
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<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<td>Total Credits</td>
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</tr>
</tbody>
</table>

Capstone Experience: DEMR 2334 Advanced Diesel Tune-up and Troubleshooting

² Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

Heavy Diesel Truck, Certificate of Technology

Program Information
The diesel technology department at San Jacinto College is committed to teaching students this technology at industry level, while maintaining a close relationship with the diesel industry. We assist students with career options and job placement opportunities. The most important focus of this department is students and their knowledge acquisition.

The San Jacinto College diesel technology program:
• is committed to teaching students technology at industry level, while maintaining a close relationship with the diesel industry;
• teaches engine testing and repair, electrical systems, HVAC, power train, brake systems, safety, and more; and
• offers an associate degree program that provides students the business background needed to open doors on the corporate and management sides of the industry.

Career Opportunities
Careers in diesel technology are at an all-time high. Most of our students are hired before graduation. Many students are recruited by companies and organizations such as:
• Cummins
• Stewart & Stevenson
• City of Houston
• Penske Corporation
• Houston area truck dealers

Earning Potential
Bus & Truck Mechanics & Diesel Engine Specialists median salary: $47,925 per year

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 ext. 7343.
Campus
North Campus

Information
The heavy diesel truck certificate of technology will focus on the technical training required to enter the field of diesel technology in the repair and maintenance of over-the-road heavy duty diesel trucks. Topics of study will focus on the knowledge and technological skills to gain entry level employment.

Plan of Study
North Campus
4DES-L-HTR

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<thead>
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<th>Course</th>
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<tr>
<td>First Term</td>
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<td>DEMR 1301</td>
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<td>DEMR 1413</td>
<td>Fuel Systems</td>
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<td>DEMR 1423</td>
<td>Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair</td>
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<td>Basic Brake Systems</td>
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<td>DEMR 2432</td>
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<td>Third Term</td>
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<tr>
<td>DEMR 1421</td>
<td>Power Train I</td>
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Capstone Experience: DEMR 2334 Advanced Diesel Tune-up and Troubleshooting

1 DEMR 1229 Preventative Maintenance is offered as a substitute course for DEMR 2266 Field Experience-Diesel Mechanics, if jobs are not available.

HVAC, Commercial Air Conditioning Technology, Associate of Applied Science

Program Information
The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

- Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
- Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information
The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities
Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

- Residential/commercial technician
- Industrial or maintenance technician
• Independent business owner or contractor
• Refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,457

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information
The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Associate of Applied Science Degree
The air conditioning technology program on the North campus is designed to train students with entry-level Heating Ventilation Air Conditioning and Refrigeration (HVAC/R) skills required for the field of commercial and industrial air conditioning, refrigeration and heating. The greater Houston Gulf Coast area is generally considered to be the most air conditioned region in the world. Graduates will complete their training in the new Center for Industrial Technology and may use their knowledge and ability to become a state licensed independent business owner or find employment with the many companies looking for qualified technicians. Training includes the installation, repair and maintenance of commercial and industrial air conditioning, refrigeration and heating equipment.

Admission
No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study
North Campus
3AIRC-C

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Credits 16

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Credits 16

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Speech 3

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<td>Language, Philosophy, and Culture or Creative Arts 1</td>
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Credits 15

Total Credits 60

Capstone Experience: HART 2368 Practicum (or Field Experience)

HVAC/R Technology/Technician or HART 2338 Air Conditioning Installation and Startup

1 Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.
Program Information

The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

• Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
• Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information

The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities

Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

• Residential/commercial technician
• Industrial or maintenance technician
• Independent business owner or contractor
• Refrigeration technician

Earning Potential

Heating and air conditioning mechanic and installer median salary: $45,457

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses

North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Certificate of Technology

The Commercial Air Conditioning Certificate of Technology is comprised of 32 semester credit hours and is designed for those wanting to complete the technical air conditioning technology courses required for a degree but want to enter the job market as soon as possible. All courses on this certificate apply to the associate of applied science degree.

Admission

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study

North Campus
4AIRC-C

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<td>Air Conditioning Troubleshooting</td>
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Capstone Experience: HART 2368 Practicum (or Field Experience) - HVAC/R Technology/Technician or HART 2338 Air Conditioning Installation and Startup
HVAC, Commercial Air Conditioning Technology, Level 2 Certificate

Program Information
The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

- Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
- Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information
The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities
Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

- Residential/commercial technician
- Industrial or maintenance technician
- Independent business owner or contractor
- Refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,457

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information
The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Level 2 Certificate
The Commercial Air Conditioning Level II Certificate is comprised of 45 semester credit hours and is designed for those wanting to complete the technical air conditioning technology courses required for a degree but want to enter the job market as soon as possible. All courses in this certificate apply to the associate of applied science degree.

Admission
No admission requirements.

Job entry requirements:
For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study
North Campus
5AIRC-C

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San Jacinto College 2018-2019
Program Information
The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

• Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
• Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information
The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks — one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities
Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

• Residential/commercial technician
• Industrial or maintenance technician
• Independent business owner or contractor
• Refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,4571

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information
The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Occupational Certificate
The Commercial Air Conditioning Occupational Certificate is a fast-track training option that provides an opportunity to enter the commercial air conditioning industry with a Federal EPA 608 Universal License after only one semester. Students can be registered and certified through the Texas Department of License and Regulations in air conditioning technology. All courses in this certificate program apply to the associate of applied science degree for those students wishing to continue their education.

Admission
No admission requirements.

Job entry requirements:
For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and

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**HVAC, Commercial Air Conditioning Technology, Occupational Certificate**

**Third Term**

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**Total Credits**: 45

**Capstone Experience**: HART 2368 Practicum (or Field Experience) - HVAC/R Technology/Technician or HART 2338 Air Conditioning Installation and Startup
licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study
North Campus
6AIRC-C

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Capstone Experience: HART 2441 Commercial Air Conditioning

HVAC, Residential Air Conditioning Technology Occupational Certificate

Program Information
The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

- is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.

- is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information
The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities
Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

- residential/commercial technician
- industrial or maintenance technician
- independent business owner or contractor
- refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,457

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information
The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Occupational Certificate
The Residential Air Conditioning Occupational Certificate program is designed to provide students with foundational knowledge, skills, and abilities for entry-level employment in the residential and light commercial heating, ventilation, air conditioning and refrigeration. The purpose of this certificate is to provide short-term training, usually completed in one semester, for the student to move quickly into the air conditioning and refrigeration career field. Students are eligible for the certificate indicated upon completion of the designated courses. All the courses in this certificate apply toward the certificate of technology and the associate of applied science degree.

Admission
No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed.
by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study
South Campus
6AIRC-R

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**Capstone Experience:** HART 1441 Residential Air Conditioning

HVAC, Residential Air Conditioning Technology, Associate of Applied Science

Program Information
The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

- Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
- Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

Additional Information
The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

Career Opportunities
Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

- Residential/commercial technician
- Industrial or maintenance technician
- Independent business owner or contractor
- Refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,457

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information
The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Associate of Applied Science
The Air Conditioning Technology program is designed to provide students with a study of electrical and mechanical knowledge, skills and abilities needed for employment in today’s residential and light commercial Heating Ventilation Air Conditioning and Refrigeration (HVAC/R) careers. These skills help prepare students for employment as installers, salespersons and technicians in residential and light commercial air conditioning, refrigeration and heating. A graduate of this program will have a good foundational knowledge in the principles of air conditioning, heating and refrigeration, with main emphasis on installation, troubleshooting and customer service. Related topics of energy conservation, air systems design and analysis, advanced HVAC/R controls and air conditioning codes are thoroughly covered. While this degree provides the student with 45 credit hours of HVAC/R specific
courses, it also provides the student with 15 credit hours of general education courses should the student look to pursue a higher degree in the future.

## Admission
No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

## Plan of Study

### South Campus

#### 3AIRC-R

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<thead>
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<td><strong>Fourth Term</strong></td>
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**Capstone Experience:** HART 2336 Air Conditioning Troubleshooting

1 Courses which satisfy this requirement are listed in in Humanities and Fine Arts, and Social and Behavioral Sciences sections of the Transfer Core Curriculum.

## Program Information

The heating, ventilating, air conditioning and refrigeration (HVACR) industry continues to technologically advance, especially in the areas of computerization and sophisticated control systems. Thus, there is an upward trend in the changing skill sets required for successful service technicians. If you’re passionate about progressive technology and are interested in a satisfying high-demand career based on skill, then the San Jacinto College air conditioning technology program is right for you.

The San Jacinto College air conditioning (HVACR) technology program:

- Is designed to provide students with the necessary skills required to become a state licensed independent business owner/contractor, or for employment in the industry as a technician in residential, commercial and/or industrial air conditioning, refrigeration and heating.
- Is made up of a curriculum that provides the basic preparation for entry-level jobs in the fields of air conditioning, refrigeration and heating with initial focus on troubleshooting and service. As the student advances through the program, related topics of indoor air quality, load calculation, system design and industry code standards are also covered.

## Additional Information

The Fast Track to HVACR program allows students to complete an occupational certificate in just 16 weeks – one semester.

Upon completion of each certificate, students may become certified with the state by registering with the Texas Department of Licensing and Regulation (TDLR).

## Career Opportunities

Graduates of the air conditioning program will enter a high demand field with excellent wage earning potential. Presently, industry advisors say the demand for technicians has a 10-year backlog, and a 21 percent growth rate, faster than the average for all occupations.

Graduates of the San Jacinto College air conditioning technology program have the opportunity to work as:

- Residential/commercial technician
- Industrial or maintenance technician
• Independent business owner or contractor
• Refrigeration technician

Earning Potential
Heating and air conditioning mechanic and installer median salary: $45,457

Source: texaswages.com, Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information contact North Campus at 281-998-6150 ext. 7264; South Campus at 281-998-6150 ext. 3777.

Information

The Commercial Air Conditioning program is offered at the San Jacinto College North campus. The Residential Air Conditioning program is offered at the San Jacinto College South Campus. Both programs offer an occupational certificate, a certificate of technology, and an associate of applied science. The North Campus offers the Level 2 certificate. All courses in each certificate apply to the commercial or residential associate of applied science.

Certificate of Technology

The Residential Air Conditioning Certificate of Technology builds on the Residential Occupational Certificate to provide students with more advanced residential and light commercial Heating Ventilation Air Conditioning and Refrigeration (HVAC/R) knowledge, skills and abilities in electrical and mechanical controls and systems, refrigeration, installation and customer service. Graduates with this award can seek entry-level employment as air conditioning and refrigeration installers, HVAC/R salespersons, service technicians and/or air conditioning contractors. All courses on this certificate apply to the associate of applied science degree.

Admission

No admission requirements.

Job entry requirements:

For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair. Reference Texas House Bill 1508.

Plan of Study

South Campus
4AIRC-R

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Capstone Experience: HART 2368 Practicum (or Field Experience) - HVAC/R Technology/Technician or HART 2338 Air Conditioning Installation and Startup

Approved Electives

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<td>Air Conditioning Troubleshooting</td>
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<td>HART 2345</td>
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<td>HART 2349</td>
<td>Heat Pumps</td>
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Instrumentation Technology, Associate of Applied Science

Program Information

As machines continue to evolve in digital sophistication, intricately connected and operated by complex control systems, instrument technicians have become indispensable to keeping the wheels of industry turning. Working in a comprehensive industrial computer control lab, students learn how to install, maintain, and troubleshoot intelligent integrated control systems, developing skills highly sought after in chemical plants, refineries, pipeline companies, power plants, water treatment facilities, all types of manufacturing plants and many more.

Career Opportunities

The primary focus of San Jacinto College's Instrumentation Technology program is to provide the industry with high-quality, trainable, entry-
level technicians. Our graduates will find employment in the following industries:

• Chemical plants
• Oil refineries
• Oil exploration and production companies
• Cross-country pipeline companies
• Electrical power plants
• Municipal water treatment facilities
• Manufacturer field technician positions
• Instrumentation maintenance positions in large buildings or on campus type facilities
• Manufacturing plants
• Instrumentation sales

For more information contact 281-998-6150 x 1352 or email Joseph.Zwiercan@sjcd.edu

Campus
Central Campus

Information
Instrumentation technology training at San Jacinto College falls into three categories: instrumentation installation, general instrument maintenance, and control systems technology.

Instrumentation technology is arguably the most technologically challenging field in industry today. Highly trained instrument technicians are responsible for installing, calibrating and troubleshooting individual process instruments as well as complete control systems. They are expected to understand the workings of a process as well as the complexity of the control system.

Computer control in the processing industry provides a platform for more sophisticated control strategies, and requires connecting intelligent devices together through various networking systems and protocols.

Key facilities of the instrumentation technology program at San Jacinto College are a fully equipped pneumatic control lab and an analog electronic lab control. We also have a 10-station SLC 5/03 Programmable Logic Controller (PLC) lab and a 10-station Emerson Process Management DeltaV Distributed Control System (DCS) lab with 10 fully-operational flowing process instrumented stations. In addition, we have access to a full-sized functioning distillation (ethylene glycol and water separation) unit to explore maintenance issues and control strategies.

Our primary focus is in providing the local processing industry with good, trainable entry-level technicians. However, our students will have the latitude of working in other related areas such as oil exploration and production, municipal water treatment facilities for cross-country pipeline companies, electrical power plants and in manufacturer field technician positions.

Plan of Study
Central Campus

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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>INCR 1302</td>
<td>Physics of Instrumentation</td>
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<td>TECM 1301</td>
<td>Industrial Mathematics (or higher)</td>
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<td>Basic Mechanical Skills for Energy</td>
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<td>OSHT 1320</td>
<td>Energy Industrial Safety</td>
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<td>Analog Controls I</td>
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<td>INTC 2310</td>
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<td>INTC 2330</td>
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<td>INTC 2359</td>
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Capstone Experience: INTC 2330 Instrumentation Systems Troubleshooting or INTC 2388 Internship Instrumentation Technology/Technician

Verification of workplace competencies

1 Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra. Students entering this program with MATH 1314 College Algebra or higher may substitute the higher Math course for TECM 1301 Industrial Mathematics.

2 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

3 Students who have successfully completed ENGL 1302 Composition II Composition II or ENGL 2311 Technical and Business Writing Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.
Instrumentation Technology, Enhanced Skills Certificate

Program Information
As machines continue to evolve in digital sophistication, intricately connected and operated by complex control systems, instrument technicians have become indispensable to keeping the wheels of industry turning. Working in a comprehensive industrial computer control lab, students learn how to install, maintain, and troubleshoot intelligent integrated control systems, developing skills highly sought after in chemical plants, refineries, pipeline companies, power plants, water treatment facilities, all types of manufacturing plants and many more.

Career Opportunities
The primary focus of San Jacinto College's Instrumentation Technology program is to provide the industry with high-quality, trainable, entry-level technicians. Our graduates will find employment in the following industries:

- Chemical plants
- Oil refineries
- Oil exploration and production companies
- Cross-country pipeline companies
- Electrical power plants
- Municipal water treatment facilities
- Manufacturer field technician positions
- Instrumentation maintenance positions in large buildings or on campus type facilities
- Manufacturing plants
- Instrumentation sales

For more information contact 281-998-6150 x 1352 or email Joseph.Zwiercan@sjcd.edu

Enhanced Skills Certificate
The enhanced skills certificate in instrumentation technology is designed for students who have completed the instrumentation technology associate of applied science degree.

Plan of Study
Central Campus
EINST

Please see Instrumentation Technology, Associate of Applied Science (p. 113) page for more information.

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San Jacinto College 2018-2019
Instrumentation Technology, Level 2 Certificate

Program Information
As machines continue to evolve in digital sophistication, intricately connected and operated by complex control systems, instrument technicians have become indispensable to keeping the wheels of industry turning. Working in a comprehensive industrial computer control lab, students learn how to install, maintain, and troubleshoot intelligent integrated control systems, developing skills highly sought after in chemical plants, refineries, pipeline companies, power plants, water treatment facilities, all types of manufacturing plants and many more.

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- Instrumentation maintenance positions in large buildings or on campus type facilities
- Manufacturing plants
- Instrumentation sales

For more information contact 281-998-6150 x 1352 or email Joseph.Zwiercan@sjcd.edu

Campus
Central Campus

Information
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Plan of Study
Central Campus
5INST

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<td>INTC 1315</td>
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San Jacinto College 2018-2019
Capstone Experience: INTC 2330 Instumentation Systems Troubleshooting or INTC 2388 Internship Instrumentation Technology/Technician

Verification of workplace competencies.

1. Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra. Students entering this program with MATH 1314 College Algebra or higher may substitute the higher Math course for TECM 1301 Industrial Mathematics.

2. Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

Maritime Transportation, Associate of Applied Science

Program Information

Do you get swept up by thoughts of a life at sea? Do high salaries and vacation time off interest you? If so, pursuing a degree in maritime transportation might be right for you! The San Jacinto College maritime transportation associate degree program offers United States Coast Guard (USCG)-approved and internationally recognized Standards of Training, Certification, and Watchkeeping (STCW) maritime training, and deck level course work for all professional mariners. Training ranges from the entry-level deckhand on an inland towboat, to Unlimited Tonnage Masters on the world's largest ships, and everything in between.

Our staff consists of USCG-approved Ship Masters, Chief Engineers, former U.S. Navy, Merchant Marine Officers, and skilled technicians with more than a century of combined experience who make the learning experience both effective and enjoyable.

The San Jacinto College associate degree maritime transportation program:

- Provides students with U.S. Coast Guard-approved instruction to be capable, knowledgeable mariners
- Provides instruction, actual experience, and course work to become a professional mariner or professional captain
- Maximizes the number of maritime courses the student can enroll in and includes general academic courses

Career Opportunities

Texas ranks first in the nation for both domestic and international freight with its waterways, handling almost 50 million tons of freight shipments each year and has been the top exporting state for 13 years.

In Houston, more than 200,000 barge transits occur in and out of the Port of Houston each year.

Texas waterways and ports support approximately 1,170,000 jobs and contribute $264 billion to the state's economy. These lucrative jobs hold great potential for professional growth and advancement in the maritime transportation industry.

Earning Potential

Note: Below are starting salaries in Texas. Salaries for these positions greatly increase within the Houston region, where there is high vessel traffic.

Sailors and Marine Oilers median salary: $39,620 per year
Captains, Mates, and Pilots median salary: $132,552 per year

1. Source: www.texaswages.com (http://www.texaswages.com), Gulf Coast region, 2017

For more information contact 281-974-2200 or amy.arrowood@sjcd.edu.

Campus

Maritime Campus

Information

The maritime transportation program was developed at the request of an advisory committee comprised of members from the maritime industry. Maritime is a semester credit hour program that incorporates U.S. Coast Guard approved training into the semester credit courses. This training provides instruction to prepare students for a future career as a mariner on board vessels. As part of the associate of applied science degree in maritime transportation, students must complete two Practicums during summer terms. This typically means working as a deckhand or crew member on a commercial vessel. Students will obtain a Transportation Worker's Identification Credential (TWIC) during the first semester.

All U.S. Merchant Mariners are credentialed by a branch of the U.S. Coast Guard- National Maritime Center. It is important that students be able to obtain a Merchant Mariner Credential. Students must be able to pass security screening, medical and professional standard requirements set by the U.S. Coast Guard.

All maritime transportation courses with NAUT rubric are held at the Maritime Campus 3700 Old Highway 146 La Porte, TX 77571.

Call the Maritime Campus for additional information at 281-974-2200. Press 1 for Maritime.

Note that additional fees are required as part of this program. These fees will be located in the Tuition and Fees section of the catalog or on sanjac.edu website under the Apply and Register menu tab/Paying for College.

Admission

Graduates of the Maritime program who apply for a U.S. Coast Guard license will be required to meet professional requirements, which includes drug testing.
Maritime, Occupational Certificate

Employers often have additional requirements and stricter standards.

The medical standards can be found at:  https://www.dco.uscg.mil/Portals/9/NMC/pdfs/forms/NVIC_04-08.pdf

For more information, please visit with the San Jacinto College Maritime director at Amy.Arrowood@sjcd.edu or 281-998-6391.

Plan of Study

Central Campus

3 Maritime

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<thead>
<tr>
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<tr>
<td>NAUT 1374</td>
<td>Basic Safety and Survival</td>
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<td>Introduction to Ships and Shipping</td>
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<td>or PHED 1105</td>
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<td>NAUT 1274</td>
<td>Marine Cargo Operations II</td>
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<td>NAUT 1273</td>
<td>Engineering Familiarization</td>
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<td>NAUT 2364</td>
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<td>NAUT 2471</td>
<td>Terrestrial and Coastal Navigation</td>
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<td>NAUT 1174</td>
<td>Maritime Regulation and Management</td>
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<td>NAUT 2274</td>
<td>Basic Stability and Ship Construction</td>
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<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<td>or ITSC 1309</td>
<td>or Integrated Software Applications I</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts 2</td>
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<td><strong>Fourth Term</strong></td>
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<td>NAUT 2472</td>
<td>Integrated Operations for the Master Mariner</td>
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<td>NAUT 2171</td>
<td>Upgrade to Apprentice Mate</td>
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<td>NAUT 2278</td>
<td>Bridge Resource Management and Shiphandling</td>
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<td>NAUT 2272</td>
<td>Radar Observer Unlimited</td>
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**Capstone Experience:** NAUT 2365 Practicum

1 Practicums are internships on commercial vessels offered during the Post Yr1 and Post Yr2 summer term of the program.

2 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.

Maritime, Occupational Certificate

Program Information

Do you get swept up by thoughts of a life at sea? Do high salaries and vacation time off interest you? If so, pursuing a degree in maritime transportation might be right for you! The San Jacinto College maritime transportation associate degree program offers United States Coast Guard (USCG)-approved and internationally recognized Standards of Training, Certification, and Watchkeeping (STCW) maritime training, and deck level course work for all professional mariners. Training ranges from the entry-level deckhand on an inland towboat, to Unlimited Tonnage Masters on the world's largest ships, and everything in between.

Our staff consists of USCG-approved Ship Masters, Chief Engineers, former U.S. Navy, Merchant Marine Officers, and skilled technicians with more than a century of combined experience who make the learning experience both effective and enjoyable.

The San Jacinto College associate degree maritime transportation program:

- Provides students with U.S. Coast Guard-approved instruction to be capable, knowledgeable mariners
- Provides instruction, actual experience, and course work to become a professional mariner or professional captain
- Maximizes the number of maritime courses the student can enroll in and includes general academic courses

Career Opportunities

Texas ranks first in the nation for both domestic and international freight with its waterways, handling almost 50 million tons of freight shipments each year and has been the top exporting state for 13 years.

In Houston, more than 200,000 barge transits occur in and out of the Port of Houston each year.

Texas waterways and ports support approximately 1,170,000 jobs and contribute $264 billion to the state’s economy. These lucrative jobs hold great potential for professional growth and advancement in the maritime transportation industry.

Earning Potential

Note: Below are starting salaries in Texas. Salaries for these positions greatly increase within the Houston region, where there is high vessel traffic.

San Jacinto College 2018-2019
Information

The maritime transportation program was developed at the request of an advisory committee comprised of members from the maritime industry. Maritime is a semester credit hour program that incorporates U.S. Coast Guard approved training into the semester credit courses. This training provides instruction to prepare students for a future career as a mariner on board vessels. As part of the associate of applied science degree in maritime transportation, students must complete two Practicums during summer terms. This typically means working as a deckhand or crew member on a commercial vessel. Students will obtain a Transportation Worker's Identification Credential (TWIC) during the first semester.

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3700 Old Highway 146
La Porte, TX 77571.

Call the Maritime Campus for additional information at 281-974-2200. Press 1 for Maritime.

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Employers often have additional requirements and stricter standards.

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For more information, please visit with the San Jacinto College Maritime director at Amy.Arrowood@sjcd.edu or 281-998-6391.

Plan of Study

Central Campus

6MAR-CI

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<td>NAUT 1372</td>
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<td>IBUS 1300</td>
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<td>NAUT 1273</td>
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<tr>
<td>or ITSC 1309</td>
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<td>or Integrated Software Applications I</td>
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<tr>
<td>Third Term</td>
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<td>NAUT 1274</td>
<td>Marine Cargo Operations II</td>
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<td>NAUT 1374</td>
<td>Basic Safety and Survival</td>
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<td>NAUT 1276</td>
<td>Seamanship II</td>
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Capstone Experience: NAUT 1276 Seamanship II

NDT, Fixed Equipment Specialist, Enhanced Skills Certificate

Program Information

Nondestructive Testing (NDT) and Inspection is a fast-growing, diverse, high-paying industry. We do more than train you for a job, we prepare you for a career!

Our program offers students the training needed to enter the inspection and quality industry and the hours required for certification; with training that conforms to ASNT - American Society of Nondestructive Testing SNT-TC-1A Level II.

We offer a one-year certificate of technology, and a second year of advanced courses to earn an Associate of Applied Science degree or level 2 certificate. Courses are offered in the evenings and on Saturdays to accommodate your work schedule.

Job opportunities are diverse, so pick your industry. Graduates may work in industries such as: petrochemical, oil and gas, fabrication, welding, pipeline, turbines, aerospace, and more.

Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.
Test Methods
Ultrasound
Phased Array
Eddy Current Testing
Liquid Penetrant Testing
Magnetic Particle Testing
Visual Inspection
Radiographic Film Interpretation
Metrology
Charpy
Tensile
Hardness
PMI

Career Opportunities
Graduates of San Jacinto College's NDT technology program may find employment as:

- NDT Technician in: VT, PT, MT, UT, ET, RFI
- UT Flaw Sizing, Phased Array, FMC, TFM
- AWS - Certified Welding Inspector (CWI)
- API Inspector - API 510, API 570
- Quality Technician, Inspector or Manager
- Metallurgical, Corrosion or Coating Technician

Earning Potential
Wages are based upon experience, skill level, testing method and a synergy of multiple certifications.

Average Wages Per Year:
- Non-Destructive Testing Specialist (median): $59,556 per year
- NDT Level I $57,807
- NDT Level II $83,739
- NDT Level III $103,991
- Certified Welding Inspector $64,084
- Quality Inspector $49,694
- API 510 Pressure Vessels Inspector $86,211
- API 570 Piping Inspector $72,347

2 PQNDT
3 American Welding Society Payscale, 2018
4 ASQ QP Fall 2017 Salary Survey
5 American Petroleum Institute Payscale, 2018

For additional information contact 281-478-2799.

Campus
Central Campus

Information
The Fixed Equipment Specialist Enhanced Skills Certificate in Nondestructive Testing is designed for the student who has completed the Nondestructive Testing Associate of Applied Science Degree.

Admission
No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

1 Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study
Central Campus
EWLD-FXEQP

Please see Nondestructive Testing Technology, Associate of Applied Science page for more information.

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<thead>
<tr>
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<th>Title</th>
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<tr>
<td>NDTE 2411</td>
<td>Preparation for Certified Welding Inspector Exam</td>
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<td>NDTE 2339</td>
<td>Pressure Piping Inspection</td>
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<td>NDTE 2470</td>
<td>Pressure Vessel Inspection</td>
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These advanced subjects require 5 years experience to sit for a certification exam. The courses are designed for both those wanting the knowledge to be able to work to gain experience and those preparing to sit for exams.
NDT, Nondestructive Testing Technology, Associate of Applied Science

Program Information
Nondestructive Testing (NDT) and Inspection is a fast-growing, diverse, high-paying industry. We do more than train you for a job, we prepare you for a career!

Our program offers students the training needed to enter the inspection and quality industry and the hours required for certification; with training that conforms to ASNT - American Society of Nondestructive Testing SNT-TC-1A Level II.

We offer a one-year certificate of technology, and a second year of advanced courses to earn an Associate of Applied Science degree or level 2 certificate. Courses are offered in the evenings and on Saturdays to accommodate your work schedule.

Job opportunities are diverse, so pick your industry. Graduates may work in industries such as: petrochemical, oil and gas, fabrication, welding, pipeline, turbines, aerospace, and more.

Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.

Test Methods
Ultrasonics
Phased Array
Eddy Current Testing
Liquid Penetrant Testing
Magnetic Particle Testing
Visual Inspection
Radiographic Film Interpretation
Metrology
Charpy
Tensile
Hardness
PMI

Career Opportunities
Graduates of San Jacinto College's NDT technology program may find employment as:

- NDT Technician in: VT, PT, MT, UT, ET, RFI
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- AWS - Certified Welding Inspector (CWI)
- API Inspector - API 510, API 570
- Quality Technician, Inspector or Manager
- Metallurgical, Corrosion or Coating Technician

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2 PQNDT

3 American Welding Society Payscale, 2018

4 ASQ QP Fall 2017 Salary Survey

5 American Petroleum Institute Payscale, 2018

For additional information contact 281-478-2799.

Campus
Central Campus

Information
Students pursuing the Nondestructive Testing Associate of Applied Science Degree can earn the technical training necessary to begin working in the testing, inspection, and quality fields.

San Jacinto College offers classroom training in:

- VT - Visual Inspection,
- MT - Magnetic Particle Testing,
- PT - Liquid Penetrant Testing,
- UT - Ultrasonic Testing,
- ET - Eddy Current Testing, and
- Radiographic Film Interpretation,
in conformance to the American Society for Nondestructive Testing SNT-TC-1A guidelines.

Additional coursework in: Standards, Metallurgy, Metrology, and Advanced Ultrasonics provide the foundations needed for the diversity and adaptability of skills needed in the workplace.

This training prepares students for entry-level work in nondestructive testing, Inspection and Quality careers in such industries as: petrochemical, fabrication, maintenance, construction, turbine and aviation, machining, metal working, quality labs and metallurgical testing.

**Admission**

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.¹
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

¹ Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

**Plan of Study**

**Central Campus**

3WLD-NDT

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<td>Introduction to Ultrasonics: Level 1 &amp; 2</td>
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<td>Advanced Ultrasonics: Phased Array and A.U.T.</td>
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**Fourth Term**

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<td>NDTE 2401</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<td>Credits</td>
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**Capstone Experience:** NDTE 2401 Advanced Ultrasonics: Phased Array and A.U.T.

¹ May use ENGL 1302 Composition II, or ENGL 2311 Technical and Business Writing if transferring to a baccalaureate program. Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

² May use MATH 1314 College Algebra College Algebra or Higher if transferring to a baccalaureate program.

³ Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

**NDT, Nondestructive Testing Technology, Certificate of Technology**

**Program Information**

Nondestructive Testing (NDT) and Inspection is a fast-growing, diverse, high-paying industry. We do more than train you for a job, we prepare you for a career!

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Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.

**Test Methods**

- Ultrasonics
- Phased Array
- Eddy Current Testing
- Liquid Penetrant Testing
- Magnetic Particle Testing
- Visual Inspection
- Radiographic Film Interpretation
- Metrology
- Charpy
- Tensile
- Hardness
- PMI

**Career Opportunities**

Graduates of San Jacinto College's NDT technology program may find employment as:

- NDT Technician in: VT, PT, MT, UT, ET, RFI
- UT Flaw Sizing, Phased Array, FMC, TFM
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2. PQNDT
3. American Welding Society Payscale, 2018
4. ASQ QP Fall 2017 Salary Survey
5. American Petroleum Institute Payscale, 2018

For additional information contact 281-478-2799.

**Campus**

Central Campus

**Information**

Students pursuing the nondestructive testing program courses can earn the technical training necessary to begin working in the testing and inspection field.

San Jacinto College offers classroom training in:

- VT - Visual Inspection
- MT - Magnetic Particle Testing
- PT - Liquid Penetrant Testing
- UT - Ultrasonic Testing, and
- Radiographic Film Interpretation,

in conformance to the American Society for Nondestructive Testing SNT-TC-1A guidelines.

Additional coursework in: Standards, Metallurgy, Metrology provide the foundations needed for adaptability in the workplace.

The training prepares students for entry-level work in Nondestructive Testing.

**Admission**

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

1. Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

**Plan of Study**

Central Campus

4WLD-NDT

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<td>Testing and Inspection Systems</td>
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NDTE 1410 | Liquid Penetrant, Magnetic Particle and Visual Testing: Level 1 & 2 | 4
NDTE 1405 | Introduction to Ultrasonics: Level 1 & 2 | 4
ETWR 1302 | Introduction to Technical Writing | 3

Credits | 15

Second Term
WLGD 1437 | Introduction to Welding Metallurgy | 4
QCTC 2331 | Standards and Codes | 3
NDTE 1301 | Film Interpretation of Weldments | 3
QCTC 1448 | Metrology and Prints | 4

Credits | 14
Total Credits | 29

**Capstone Experience:** QCTC 2331 Standards and Codes

1 May use ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing if transferring to a baccalaureate program. Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

### NDT, Nondestructive Testing Technology, Level 2 Certificate

#### Program Information

Nondestructive Testing (NDT) and Inspection is a fast-growing, diverse, high-paying industry. We do more than train you for a job; we prepare you for a career!

Our program offers students the training needed to enter the inspection and quality industry and the hours required for certification; with training that conforms to ASNT - American Society of Nondestructive Testing SNT-TC-1A Level II.

We offer a one-year certificate of technology, and a second year of advanced courses to earn an Associate of Applied Science degree or level 2 certificate. Courses are offered in the evenings and on Saturdays to accommodate your work schedule.

Job opportunities are diverse, so pick your industry. Graduates may work in industries such as: petrochemical, oil and gas, fabrication, welding, pipeline, turbines, aerospace, and more.

Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.

#### Test Methods

- Ultrasonics
- Phased Array
- Eddy Current Testing
- Liquid Penetrant Testing
- Magnetic Particle Testing
- Visual Inspection
- Radiographic Film Interpretation
- Metrology
- Charpy
- Tensile
- Hardness
- PMI

#### Career Opportunities

Graduates of San Jacinto College’s NDT technology program may find employment as:

- NDT Technician in: VT, PT, UT, ET, RFI
- UT Flaw Sizing, Phased Array, FMC, TFM
- AWS - Certified Welding Inspector (CWI)
- API Inspector - API 510, API 570
- Quality Technician, Inspector or Manager
- Metallurgical, Corrosion or Coating Technician

#### Earning Potential

Wages are based upon experience, skill level, testing method and a synergy of multiple certifications.

Average Wages Per Year:

Non-Destructive Testing Specialist (median): $59,556 per year

- NDT Level I $57,807
- NDT Level II $83,739
- NDT Level III $103,991
- Certified Welding Inspector $64,084
- Quality Inspector $49,694
- API 510 Pressure Vessels Inspector $86,211
- API 570 Piping Inspector $72,347


2 PQNDT

3 American Welding Society Payscale, 2018
For additional information contact 281-478-2799.

Campus
Central Campus

Admission
No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.\(^1\)
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

\(^1\) Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study
Central Campus

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>QCTC 1446</td>
<td>Testing and Inspection Systems</td>
<td>4</td>
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<td>NDTE 1410</td>
<td>Liquid Penetrant, Magnetic Particle and Visual Testing: Level 1 &amp; 2</td>
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<tr>
<td>NDTE 1405</td>
<td>Introduction to Ultrasonics: Level 1 &amp; 2</td>
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<tr>
<td>ETWR 1302</td>
<td>Introduction to Technical Writing (^1)</td>
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<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Second Term</strong></td>
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<tr>
<td>WLGD 1437</td>
<td>Introduction to Welding Metallurgy</td>
<td>4</td>
</tr>
<tr>
<td>QCTC 2331</td>
<td>Standards and Codes</td>
<td>3</td>
</tr>
<tr>
<td>NDTE 1301</td>
<td>Film Interpretation of Weldments</td>
<td>3</td>
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<tr>
<td>QCTC 1448</td>
<td>Metrology and Prints</td>
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<td><strong>Credits</strong></td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>NDTE 1454</td>
<td>Intermediate Ultrasonics: Flaw Detection and Sizing</td>
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<td>NDTE 1440</td>
<td>Eddy Current Testing</td>
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<td><strong>Fourth Term</strong></td>
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<td>WLGD 2455</td>
<td>Advanced Metallurgy</td>
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<td>NDTE 2401</td>
<td>Advanced Ultrasonics: Phased Array and A.U.T.</td>
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**Capstone Experience:** NDTE 2401 Advanced Ultrasonics: Phased Array and A.U.T.

May use ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing if transferring to a baccalaureate program. Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

NDT, Quality Analyst, Enhanced Skills Certificate

Program Information
Nondestructive Testing (NDT) and inspection is a fast-growing, diverse, high-paying industry. We do more than train you for a job, we prepare you for a career!

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Job opportunities are diverse, so pick your industry. Graduates may work in industries such as: petrochemical, oil and gas, fabrication, welding, pipeline, turbines, aerospace, and more.

Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.

Test Methods

- Ultrasonics
- Phased Array
- Eddy Current Testing
- Liquid Penetrant Testing
- Magnetic Particle Testing
- Visual Inspection
- Radiographic Film Interpretation
- Metrology
- Charpy
- Tensile
- Hardness
- PMI

Career Opportunities
Graduates of San Jacinto College’s NDT technology program may find employment as:

- NDT Technician in: VT, PT, MT, UT, ET, RFI
- UT Flaw Sizing, Phased Array, FMC, TFM
- AWS - Certified Welding Inspector (CWI)
• API Inspector - API 510, API 570
• Quality Technician, Inspector or Manager
• Metallurgical, Corrosion or Coating Technician

Earning Potential
Wages are based upon experience, skill level, testing method and a synergy of multiple certifications.

Average Wages Per Year:

Non-Destructive Testing Specialist (median): $59,556 per year 1
NDT Level I $57,807 2
NDT Level II $83,739 2
NDT Level III $103,991 2
Certified Welding Inspector $64,084 3
Quality Inspector $49,694 4
API 510 Pressure Vessels Inspector $86,211 5
API 570 Piping Inspector $72,347 5

2 PQNDT
3 American Welding Society Payscale, 2018
4 ASQ QP Fall 2017 Salary Survey
5 American Petroleum Institute Payscale, 2018

For additional information contact 281-478-2799.

Campus
Central Campus

Information
The Quality Analyst Enhanced Skills Certificate in Nondestructive Testing is designed for the student who has completed the Nondestructive Testing Associate of Applied Science Degree.

Admission
No admission requirements.

Job entry requirements:
• Pass a drug test on a regular basis.
• Pass a criminal background check. 1
• Some career paths require a TWIC Card.
• Some career paths require a good driving record.

1 Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study
Central Campus

EWLD-NDT

Please see Nondestructive Testing Technology, Associate of Applied Science page for more information.

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>QCTC 1341</td>
<td>Statistical Process Control</td>
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<td>QCTC 1343</td>
<td>Quality Assurance</td>
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<td>BMGT 1309</td>
<td>Information and Project Management</td>
<td>3</td>
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NDT, Quality Assurance Technician, Occupational Certificate

Program Information
Nondestructive Testing (NDT) and Inspection is a fast-growing, diverse, high-paying industry: We do more than train you for a job, we prepare you for a career!

Our program offers students the training needed to enter the inspection and quality industry and the hours required for certification; with training that conforms to ASNT - American Society of Nondestructive Testing SNT-TC-1A Level II.

We offer a one-year certificate of technology, and a second year of advanced courses to earn an Associate of Applied Science degree or level 2 certificate. Courses are offered in the evenings and on Saturdays to accommodate your work schedule.

Job opportunities are diverse, so pick your industry. Graduates may work in industries such as: petrochemical, oil and gas, fabrication, welding, pipeline, turbines, aerospace, and more.

Courses in the program include nondestructive testing, weld inspection, metallurgy quality, metrology, and codes.

Test Methods
Ultrasonics
Phased Array
Eddy Current Testing
Liquid Penetrant Testing
Magnetic Particle Testing
Visual Inspection
Radiographic Film Interpretation
Metrology
Charpy
Tensile
Hardness
PMI
Career Opportunities

Graduates of San Jacinto College's NDT technology program may find employment as:

- NDT Technician in: VT, PT, MT, UT, ET, RFI
- UT Flaw Sizing, Phased Array, FMC, TFM
- AWS - Certified Welding Inspector (CWI)
- API Inspector - API 510, API 570
- Quality Technician, Inspector or Manager
- Metallurgical, Corrosion or Coating Technician

Earning Potential

Wages are based upon experience, skill level, testing method and a synergy of multiple certifications.

Average Wages Per Year:

Non-Destructive Testing Specialist (median): $59,556 per year¹

NDT Level I $57,807²

NDT Level II $83,739²

NDT Level III $103,991²

Certified Welding Inspector $64,084³

Quality Inspector $49,694⁴

API 510 Pressure Vessels Inspector $86,211⁵

API 570 Piping Inspector $72,347⁵


² PQNDT

³ American Welding Society Payscale, 2018

⁴ ASQ QP Fall 2017 Salary Survey

⁵ American Petroleum Institute Payscale, 2018

For additional information contact 281-478-2799.

Campus

Central Campus

Information

Persons interested in the field of quality improvement are introduced to Total Quality Management (TQM) concepts and applications as well as statistical testing methods. The students can then use these concepts and methods in industries utilizing auditing practices, quality controls, and inspection techniques.

Admission

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.¹
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

¹ Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study

Central Campus

6WLD-QAT

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<tr>
<th>Course</th>
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<tr>
<td>QCTC 1446</td>
<td>Testing and Inspection Systems</td>
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<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
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<tr>
<td>QCTC 1343</td>
<td>Quality Assurance</td>
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<td>ETWR 1302</td>
<td>Introduction to Technical Writing</td>
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<tr>
<td>BMGT 1309</td>
<td>Information and Project Management</td>
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<td>QCTC 2331</td>
<td>Standards and Codes</td>
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<td>QCTC 1448</td>
<td>Metrology and Prints</td>
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</table>

Capstone Experience: QCTC 2331 Standards and Codes

¹ May use ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing if transferring to a baccalaureate program. Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

Pipefitting Technology, Occupational Certificate
Program Information
Do you appreciate hand craftsmanship? Do you get satisfaction from seeing the final results of something you built? A career in the high-demand pipefitting technology field may be the perfect fit for you. San Jacinto College can get you on the fast track to completing your pipefitting fabricator training, enabling you to finish courses in just one semester.

Students get their training at San Jacinto College's Center for Industrial Technology in a lab that simulates a fabricator shop for hands-on learning. The courses are designed to align with the National Center for Construction Education & Research (NCCER) exams, giving students the best start to a career as a journeyman pipefitter or fabricator.

Career Opportunities
Pipefitters/fabricators are among the Texas Workforce Commission’s top 25 targeted occupations for the Gulf Coast region. World class companies like Fluor, KBR, Bechtel and others are competing for skilled workers, and wages increase with demand.

Earning Potential
Pipefitter median salary: $53,528 per year

Wages vary based on experience and regional market.


For more information, contact 281-998-6150 ext. 7529

Campus
North Campus

Information
The purpose of the Pipefitting/Fabrication Occupational Certificate is to prepare graduates to enter the construction industry as entry-level pipefitters of pipe fabricators. Pipefitters/fabricators fabricate, install and maintain pipes that carry chemicals, acids and gases. These pipes are mostly used in manufacturing, commercial and industrial settings. Pipefitters often install and maintain pipe systems in power and petrochemical plants as well as heating and cooling systems in large office buildings. Pipefitters also install pipe systems that move steam under high pressure. They work with construction crews to install piping systems in all industrial manufacturing processes.

Plan of Study
North Campus

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PFPB 1408</td>
<td>Basic Pipefitting Skills</td>
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<tr>
<td>PFPB 1443</td>
<td>Pipefitting Fabrication and Blueprint Reading</td>
<td>4</td>
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<tr>
<td>PFPB 2432</td>
<td>Advanced Pipefitting Standards, Specifications, and Installation</td>
<td>4</td>
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</tbody>
</table>

Capstone Experience: PFPB 2433 Pipefitting: Advanced Fabrication and Installation

Process Technology Chemical Technician, Enhanced Skills Certificate

Program Information
If you have a technical mind, you are in luck. Houston is home to the largest petrochemical and refining complex in the nation, and the demand for skilled process technicians continues to grow! Our graduates enter the workforce with the necessary skills that are highly prized by companies that continually hire students directly out of our program.

The San Jacinto College associate of applied science degree in process technology:

• Prepares students to become plant operators responsible for equipment, the hazards of the chemicals and the chemistry and physics involved in process technology.
• Teaches students to read piping and instrumentation diagrams, identify equipment, troubleshoot equipment, operate simulators and as a capstone course, run the Glycol Distillation Unit.
• Is praised by area industry for the quality of students graduating from the program.

Career Opportunities
Graduates of the San Jacinto College process technology program have the opportunity to work in:

• Chemical plants
• Refineries
• Wastewater treatment plants
• Canneries
• Pharmaceutical plants
• Paper mills
• Terminals
• Pipelines
• Fuel storage depots

San Jacinto College 2018-2019
Earning Potential

Chemical Plant and System Operators median salary: $70,508 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-998-6150 ext. 1495.

Campus
Central Campus

Information
The process technology department is a direct link to the largest industry in the greater Houston area and the Texas Gulf Coast region. In the past very little formal training was required prior to taking a job in the chemical process industry. However, companies in the Houston area now require more education for their entry-level technicians and are looking to community college graduates to meet those needs.

Students train in state-of-the-art process laboratory facilities similar to area refining and chemical plant environments. The College facility was built in cooperation with area petrochemical companies. San Jacinto Community College District works closely with industry as a member of the North American Process Technology Alliance (NAPTA) to maintain a curricula reflecting current technology standards.

Completion of the process technology curriculum can provide students with the technical skills required for entry-level positions as process technicians in petrochemical and related industries.

A certificate in process technology is still accepted by most of industry, however, several industries have indicated they will hire only graduates with the associate of applied science degree. Future trends indicate that most of the petrochemical industry technicians will be required to have an A.A.S. degree. Students who earn qualifications to be in the chemical lab technician specialty A.A.S. degree program have the advantage of earning qualifications for being hired into either the operations division or laboratory department of a process plant.

Enhanced Skills Certificate
The Enhanced Skills Certificate in Process Technology Chemical Technician is designed for students who have completed the Process Technology Associate of Applied Science Degree.

Plan of Study
Central Campus

EPROT-CT

Please see Process Technology, Associate of Applied Science page for more information.

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<td>&amp; CHEM 1111</td>
<td>and General Chemistry I (lab)</td>
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<td>CHEM 2323</td>
<td>Organic Chemistry I (lecture)</td>
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<tr>
<td>&amp; CHEM 2123</td>
<td>and Organic Chemistry I (lab)</td>
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</table>

Total Credits: 12

Process Technology Power Technician, Enhanced Skills Certificate

Program Information
If you have a technical mind, you are in luck. Houston is home to the largest petrochemical and refining complex in the nation, and the demand for skilled process technicians continues to grow! Our graduates enter the workforce with the necessary skills that are highly prized by companies that continually hire students directly out of our program.

The San Jacinto College associate of applied science degree in process technology:

• Prepares students to become plant operators responsible for equipment, the hazards of the chemicals and the chemistry and physics involved in process technology.
• Teaches students to read piping and instrumentation diagrams, identify equipment, troubleshoot equipment, operate simulators and as a capstone course, run the Glycol Distillation Unit.
• Is praised by area industry for the quality of students graduating from the program.

Career Opportunities
Graduates of the San Jacinto College process technology program have the opportunity to work in:

• Chemical plants
• Refineries
• Wastewater treatment plants
• Canneries
• Pharmaceutical plants
• Paper mills
• Terminals
• Pipelines
• Fuel storage depots

Earning Potential
Chemical Plant and System Operators median salary: $70,508 per year

San Jacinto College 2018-2019
Process Technology, Associate of Applied Science

Campus
Central Campus

Information
The process technology department is a direct link to the largest industry in the greater Houston area and the Texas Gulf Coast region. In the past very little formal training was required prior to taking a job in the chemical process industry. However, companies in the Houston area now require more education for their entry-level technicians and are looking to community college graduates to meet those needs.

Students train in state-of-the-art process laboratory facilities similar to area refining and chemical plant environments. The College facility was built in cooperation with area petrochemical companies. San Jacinto Community College District works closely with industry as a member of the North American Process Technology Alliance (NAPTA) to maintain a curricula reflecting current technology standards.

Completion of the process technology curriculum can provide students with the technical skills required for entry-level positions as process technicians in petrochemical and related industries.

A certificate in process technology is still accepted by most of industry, however, several industries have indicated they will hire only graduates with the associate of applied science degree. Future trends indicate that most of the petrochemical industry technicians will be required to have an A.A.S. degree. Students who earn qualifications to be in the chemical lab technician specialty A.A.S. degree program have the advantage of earning qualifications for being hired into either the operations division or laboratory department of a process plant.

Enhanced Skills Certificate
The Enhanced Skills Certificate in Process Technology Power Technician is designed for students who have completed the Process Technology Associate of Applied Science Degree.

Plan of Study
Central Campus
EPROT-PT

Please see Process Technology, Associate of Applied Science page for more information.

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<tr>
<td>ELMT 2351</td>
<td>Power Generation Fundamentals</td>
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<td>CBFM 1307</td>
<td>Boiler Operation</td>
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Program Information
If you have a technical mind, you are in luck. Houston is home to the largest petrochemical and refining complex in the nation, and the demand for skilled process technicians continues to grow! Our graduates enter the workforce with the necessary skills that are highly prized by companies that continually hire students directly out of our program.

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• Wastewater treatment plants
• Canneries
• Pharmaceutical plants
• Paper mills
• Terminals
• Pipelines
• Fuel storage depots

Earning Potential
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Campus
Central Campus
Information

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Plan of Study

Central Campus

3PROT

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<td>ENER 1240</td>
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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>PTAC 1302</td>
<td>Introduction to Process Technology</td>
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<td>TECM 1301</td>
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| Credits | 14 |

Second Term

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<td>Basic Mechanical Skills for Energy</td>
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<tr>
<td>OSHT 1320</td>
<td>Energy Industrial Safety</td>
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<tr>
<td>PTAC 1310</td>
<td>Process Technology I - Equipment</td>
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<tr>
<td>PTAC 1332</td>
<td>Process Instrumentation I</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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| Credits | 15 |

Summer Year One Term

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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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| Credits | 6 |

Third Term

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<td>PTAC 2420</td>
<td>Process Technology II-Systems</td>
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<tr>
<td>Social and Behavioral Sciences</td>
<td>2</td>
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</table>

| Credits | 13 |

Verification of workplace competencies.

Capstone Experience: PTAC 2438 Process Technology III - Operations

1 Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra. Students entering this program with MATH 1314 College Algebra or higher may substitute the higher Math course for TECM 1301 Industrial Mathematics.

2 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

3 Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

Process Technology, Level 2 Certificate

Program Information

If you have a technical mind, you are in luck. Houston is home to the largest petrochemical and refining complex in the nation, and the demand for skilled process technicians continues to grow! Our graduates enter the workforce with the necessary skills that are highly prized by companies that continually hire students directly out of our program.

The San Jacinto College associate of applied science degree in process technology:

- Prepares students to become plant operators responsible for equipment, the hazards of the chemicals and the chemistry and physics involved in process technology.
- Teaches students to read piping and instrumentation diagrams, identify equipment, troubleshoot equipment, operate simulators and as a capstone course, run the Glycol Distillation Unit.
- Is praised by area industry for the quality of students graduating from the program.
Career Opportunities
Graduates of the San Jacinto College process technology program have the opportunity to work in:

- Chemical plants
- Refineries
- Wastewater treatment plants
- Canneries
- Pharmaceutical plants
- Paper mills
- Terminals
- Pipelines
- Fuel storage depots

Earning Potential
Chemical Plant and System Operators median salary: $70,508 per year

1  Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-998-6150 ext. 1495.

Campus
Central Campus

Information
The process technology department is a direct link to the largest industry in the greater Houston area and the Texas Gulf Coast region. In the past very little formal training was required prior to taking a job in the chemical process industry. However, companies in the Houston area now require more education for their entry-level technicians and are looking to community college graduates to meet those needs.

Students train in state-of-the-art process laboratory facilities similar to area refining and chemical plant environments. The College facility was built in cooperation with area petrochemical companies. San Jacinto Community College District works closely with industry as a member of the North American Process Technology Alliance (NAPTA) to maintain a curricula reflecting current technology standards.

Completion of the process technology curriculum can provide students with the technical skills required for entry-level positions as process technicians in petrochemical and related industries.

A certificate in process technology is still accepted by most of industry, however, several industries have indicated they will hire only graduates with the associate of applied science degree. Future trends indicate that most of the petrochemical industry technicians will be required to have an A.A.S. degree. Students who earn qualifications to be in the chemical lab technician specialty A.A.S. degree program have the advantage of earning qualifications for being hired into either the operations division or laboratory department of a process plant.

Plan of Study
Central Campus
5PROT

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<th>Course</th>
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<td>CETT 1302</td>
<td>Electricity Principles</td>
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<td>TECM 1301</td>
<td>Industrial Mathematics (or higher)</td>
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<td>ENER 1330</td>
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<td>OSHT 1320</td>
<td>Energy Industrial Safety</td>
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<td>PTAC 1310</td>
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<td>PTAC 1332</td>
<td>Process Instrumentation I</td>
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<td>SCIT 1318</td>
<td>Applied Physics</td>
<td>3</td>
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<tr>
<td>PTAC 2314</td>
<td>Principles of Quality</td>
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<td>PTAC 2420</td>
<td>Process Technology II-Systems</td>
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<td>PTAC 2438</td>
<td>Process Technology III - Operations</td>
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<td>PTAC 2446 or CTEC 2487</td>
<td>Process Troubleshooting or Internship - Chemical Technology/Technician</td>
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<td>CHEM 1305 &amp; CHEM 1105</td>
<td>Introductory Chemistry I (lecture) and Introductory Chemistry I (lab)</td>
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</table>

Capstone Experience: PTAC 2438 Process Technology III - Operations or CTEC 2487 Internship - Chemical Technology/Technician

1 Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra. Students entering this program with MATH 1314 College Algebra or higher may substitute the higher Math course for TECM 1301 Industrial Mathematics.

2 Students who have successfully completed ENGL 1302 Composition II or ENGL 2311 Technical and Business Writing may receive credit for ETWR 1302 Introduction to Technical Writing.

Welding Technology, Associate of Applied Science
Program Information

In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

A welder may also be required to cut, contour and bevel metal plates and structural shapes into dimensions as specified by blueprints, work orders and templates; using torches, saws, shears or other machine tools.

San Jacinto College offers one of the largest and best-equipped welding training facilities in the region, where students can explore many facets of welding technology and gain access to career paths from manufacturing and industry to inspection and management.

The San Jacinto College welding technology program:

- Has a curriculum designed to meet the needs of the welding industry
- Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal Arc Welding (SMAW) “Stick”, Gas Metal Arc Welding (GMAW) “MIG”, Gas Tungsten Arc Welding (GTAW) “TIG” and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels
- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

Earning Potential

Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr)¹

American Welding Society Certification Wages

- Welder $13.00 - $27.00 hr²
- Pipe Welder $17.00 - $38.00 hr²
- Combo Welder $14.00 - $34.00 hr²
- TIG Welder $13.00 - $28.00 hr²

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
² American Welding Society Payscale Research Research, 2018

For more information, please contact the following:

Central Campus: 281-476-1814 or 281-478-2799

North Campus: 281-459-7178

Campuses

Central Campus

Information

The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.

Admission

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.¹
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

¹ Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study

Central and North Campuses

3WLD

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>WLDG 1428</td>
<td>Introduction to Shielded Metal Arc Welding (SMAW)</td>
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<td>WLDG 1204</td>
<td>Fundamentals of Oxy-Fuel Welding and Cutting</td>
<td>2</td>
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<td>WLDG 1413</td>
<td>Introduction to Blueprint Reading</td>
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<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
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Credits 16

Second Term

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<td>Advanced Shielded Metal Arc Welding (SMAW)</td>
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<td>WLDG 2406</td>
<td>Intermediate Pipe Welding</td>
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<td>ENGL 1301</td>
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Credits 15

Third Term

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<tr>
<td>WLDG 2451</td>
<td>Advanced Gas Tungsten Arc Welding (GTAW)</td>
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Welding Technology, Occupational Certificate

WLDG 2453  Advanced Pipe Welding  4
Speech  3

Fourth Term Credits 15
WLDG 1305  Art Metals  3
or WLDG 1337  or Introduction to Welding Metallurgy
WLDG 1412  Introduction to Flux Cored Arc Welding  4
WLDG 2480  Cooperative Education Welding  4
or WLDG 2413  or Intermediate Welding Using Multiple Processes
Social and Behavioral Sciences  3

Total Credits 60

Capstone Experience: WLDG 2480 Cooperative Education Welding or WLDG 2413 Intermediate Welding Using Multiple Processes

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

Welding Technology, Occupational Certificate

The San Jacinto College welding technology program:

- Has a curriculum designed to meet the needs of the welding industry
- Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal Arc Welding (SMAW) “Stick”, Gas Metal Arc Welding (GMAW) “MIG”, Gas Tungsten Arc Welding (GTAW) “TIG” and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels
- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

Earning Potential
Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr)

American Welding Society Certification Wages

- Welder $13.00 - $27.00 hr
- Pipe Welder $17.00 - $38.00 hr
- Combo Welder $14.00 - $34.00 hr
- TIG Welder $13.00 - $28.00 hr

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
2 American Welding Society Payscale Research Research, 2018

For more information, please contact the following:
Central Campus: 281-476-1814 or 281-478-2799
North Campus: 281-459-7178

Campuses
Central Campus
North Campus

Information
The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.

Admission
No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.

Program Information
In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

A welder may also be required to cut, contour and bevel metal plates and structural shapes into dimensions as specified by blueprints, work orders and templates; using torches, saws, shears or other machine tools.

San Jacinto College offers one of the largest and best-equipped welding training facilities in the region, where students can explore many facets of welding technology and gain access to career paths from manufacturing and industry to inspection and management.
Some career paths require a TWIC Card.
Some career paths require a good driving record.

Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study
North Campus
6WLD-ART

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<td>WLDG 1308</td>
<td>Metal Sculpture</td>
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<tr>
<td>WLDG 1428</td>
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<td>4</td>
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<tr>
<td>WLDG 1430</td>
<td>Introduction to Gas Metal Arc Welding (GMAW)</td>
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Total Credits: 16

Capstone Experience: WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW)

Welding, Combination Welder, Certificate of Technology

Program Information

In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

A welder may also be required to cut, contour and bevel metal plates and structural shapes into dimensions as specified by blueprints, work orders and templates; using torches, saws, shears or other machine tools.

San Jacinto College offers one of the largest and best-equipped welding training facilities in the region, where students can explore many facets of welding technology and gain access to career paths from manufacturing and industry to inspection and management.

The San Jacinto College welding technology program:

- Has a curriculum designed to meet the needs of the welding industry
- Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal Arc Welding (SMAW) "Stick", Gas Metal Arc Welding (GMAW) "MIG", Gas Tungsten Arc Welding (GTAW) "TIG" and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels
- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

Earning Potential

Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr)¹

American Welding Society Certification Wages

- Welder $13.00 - $27.00 hr²
- Pipe Welder $17.00 - $38.00 hr²
- Combo Welder $14.00 - $34.00 hr²
- TIG Welder $13.00 - $28.00 hr²

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
² American Welding Society Payscale Research Research, 2018

For more information, please contact the following:

Central Campus: 281-476-1814 or 281-478-2799
North Campus: 281-459-7178

Campuses

Central Campus
North Campus

Information

The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.
Certificate of Technology

The Combination Welder Certificate of Technology is designed to give intermediate and advanced welding experience to those students interested in taking shielded metal arc (SMAW) welding and gas tungsten arc (GTAW) welding on plate and pipe to meet certification tests required by industry. Instruction is provided on plate and pipe welding positions on carbon steel.

Admission

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.\(^1\)
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.\(^1\)

\(^1\) Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study

Central and North Campuses

4WLD-C

<table>
<thead>
<tr>
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<td>Introduction to Gas Tungsten Arc Welding (GTAW)</td>
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<td>WLDG 2406</td>
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Capstone Experience: WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW)

Welding, Gas Shielded Welding, Certificate of Technology

Program Information

In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

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The San Jacinto College welding technology program:

- Has a curriculum designed to meet the needs of the welding industry
- Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal Arc Welding (SMAW) “Stick”, Gas Metal Arc Welding (GMAW) “MIG”, Gas Tungsten Arc Welding (GTAW) “TIG” and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels
- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

Earning Potential

Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr)\(^1\)

American Welding Society Certification Wages

- Welder $13.00 - $27.00 hr\(^2\)
- Pipe Welder $17.00 - $38.00 hr\(^2\)
San Jacinto College

• Combo Welder $14.00 - $34.00 hr
• TIG Welder $13.00 - $28.00 hr

1 Source: texawages.com (http://texawages.com), Gulf Coast region, 2017
2 American Welding Society PayScale Research Research, 2018

For more information, please contact the following:
Central Campus: 281-476-1814 or 281-478-2799
North Campus: 281-459-7178

Campuses
Central Campus
North Campus

Information
The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.

Certificate of Technology
The Gas Shielded Welding Certificate of Technology is designed to give entry-level welding experience to those students interested in taking gas metal arc (GMAW) and gas tungsten arc (GTAW) plate and pipe welding certification tests as required by industry. Instruction is provided on plate and pipe welding positions on carbon steel.

Admission
No admission requirements.

Job entry requirements:
• Pass a drug test on a regular basis.
• Pass a criminal background check.
• Some career paths require a TWIC Card.
• Some career paths require a good driving record.

1 Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study
Central and North Campuses
4WLD-GAS

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<tr>
<td>WLDG 1430</td>
<td>Introduction to Gas Metal Arc Welding (GMAW)</td>
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Second Term

<table>
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<tr>
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<tr>
<td>WLDG 1413</td>
<td>Introduction to Blueprint Reading</td>
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<td>WLDG 1412</td>
<td>Introduction to Flux Cored Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WLDG 2480 or WLDG 2413</td>
<td>Cooperative Education Welding or Intermediate Welding Using Multiple Processes</td>
<td>4</td>
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</tbody>
</table>

Credits 12

Total Credits 24

Capstone Experience: WLDG 2480 Cooperative Education Welding or WLDG 2413 Intermediate Welding Using Multiple Processes

Welding, Industrial Welder, Level 2 Certificate

Program Information
In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

A welder may also be required to cut, contour and bevel metal plates and structural shapes into dimensions as specified by blueprints, work orders and templates; using torches, saws, shears or other machine tools.

San Jacinto College offers one of the largest and best-equipped welding training facilities in the region, where students can explore many facets of welding technology and gain access to career paths from manufacturing and industry to inspection and management.

The San Jacinto College welding technology program:
• Has a curriculum designed to meet the needs of the welding industry
• Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal
Arc Welding (SMAW) “Stick”, Gas Metal Arc Welding (GMAW) “MIG”, Gas Tungsten Arc Welding (GTAW) “TIG” and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels

- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

### Earning Potential
Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr)\(^1\)

**American Welding Society Certification Wages**

- Welder $13.00 - $27.00 hr\(^2\)
- Pipe Welder $17.00 - $38.00 hr\(^2\)
- Combo Welder $14.00 - $34.00 hr\(^2\)
- TIG Welder $13.00 - $28.00 hr\(^2\)

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

\(^2\) American Welding Society Payscale Research Research, 2018

For more information, please contact the following:

- Central Campus: 281-476-1814 or 281-478-2799
- North Campus: 281-459-7178

### Campuses
Central Campus
North Campus

### Information
The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.

### Level 2 Certificate
This certificate captures all the welding courses in both the combination welder, and gas shielded certificates of technology. This certificate covers the major welding process used in the petrochemical, and pipeline industries (SMAW, GTAW, GMAW, and FCAW). It also covers blueprint reading for welders.

### Admission
No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.\(^1\)
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

\(^1\) Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

### Plan of Study
**Central and North Campuses**
5WLD-IW

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>Introduction to Gas Tungsten Arc Welding (GTAW)</td>
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<td>WLDG 1204</td>
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**Credits** \(14\)

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<tr>
<td>WLDG 1412</td>
<td>Introduction to Flux Cored Arc Welding</td>
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<tr>
<td>WLDG 1413</td>
<td>Introduction to Blueprint Reading</td>
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**Credits** \(16\)

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<tr>
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<tr>
<td>WLDG 2453</td>
<td>Advanced Pipe Welding</td>
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<tr>
<td>WLDG 2480 or WLDG 2413</td>
<td>Cooperative Education Welding or Intermediate Welding Using Multiple Processes</td>
<td>4</td>
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</tbody>
</table>

**Credits** \(12\)

**Total Credits** \(42\)

**Capstone Experience:** WLDG 2480 Cooperative Education Welding or WLDG 2413 Intermediate Welding Using Multiple Processes
Welding, Stick Pipe Welder, Occupational Certificate

Program Information

In Texas, industries and communities are growing, especially in the petrochemical areas. As construction rates rise, so does the demand for talented welders. As construction rates rise, so does the demand for talented welders. The U.S. Bureau of Labor Statistics reports that the need for welders is expected to grow by 26 percent by 2020.

Welding is a process for permanently joining metals together by use of an electric-arc to melt a filler-metal into the original metal to make the two pieces as one. Welding can include joining parts such as piping, structural steel, steel plates, pressure vessels or even small parts; and it can be performed on carbon steel, stainless steel, aluminum and many other metals. Welding takes the skill and talent of an artist, and that skill can be acquired through training and discipline.

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The San Jacinto College welding technology program:

- Has a curriculum designed to meet the needs of the welding industry
- Provides instruction for all positions on carbon and stainless steel plate and pipe, using the following multiple processes: Shielded Metal Arc Welding (SMAW) “Stick”, Gas Metal Arc Welding (GMAW) “MIG”, Gas Tungsten Arc Welding (GTAW) “TIG” and Flux Cored Arc Welding (FCAW) processes, plus Oxy-Fuels
- Offers certificates and continuing education courses for students who want to go directly into the workforce
- Includes associate of applied science degree with academic courses to make a well-rounded individual to meet the needs of industry and continued opportunities

Earning Potential

Welder, Cutter, Solderer and Brazer

Overall: $47,923 per year ($23.04 hr\(^1\))

American Welding Society Certification Wages

- Welder $13.00 - $27.00 hr\(^2\)
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\(^1\) Source: texasswages.com (http://texasswages.com), Gulf Coast region, 2017

\(^2\) American Welding Society Payscale Research Research, 2018

For more information, please contact the following:

Central Campus: 281-476-1814 or 281-478-2799
North Campus: 281-459-7178

Campuses

Central Campus
North Campus

Information

The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will be skillful and have a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and research.

Occupational Certificate

This series of courses introduces the student to various aspects within the shielded metal arc welding (SMAW) of pipe according to common welding codes and procedures. Upon completion of this certificate, student should be successful at completing SMAW pipe weld tests as required by industry and fabrication companies. These courses may also be applied toward the combination pipe welder certificate of technology and the Associate of Applied Science in Welding Technology.

Admission

No admission requirements.

Job entry requirements:

- Pass a drug test on a regular basis.
- Pass a criminal background check.\(^1\)
- Some career paths require a TWIC Card.
- Some career paths require a good driving record.

\(^1\) Requirement varies based on type of offense and years since the offense, or the requirements of the facility where the work is being performed.

Plan of Study

Central and North Campuses
6WLD-STI
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tr>
<td>WLDG 1428</td>
<td>Introduction to Shielded Metal Arc Welding (SMAW)</td>
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<tr>
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<td>Advanced Shielded Metal Arc Welding (SMAW)</td>
<td>4</td>
</tr>
<tr>
<td>WLDG 2406</td>
<td>Intermediate Pipe Welding</td>
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<td>WLDG 2453</td>
<td>Advanced Pipe Welding</td>
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<tr>
<td><strong>Credits</strong></td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
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**Capstone Experience:** WLDG 2453 Advanced Pipe Welding
CONTINUING AND PROFESSIONAL DEVELOPMENT

- Plumbing and Pipefitting Technology, Continuing Education Certificate
- Plumbing and Pipefitting, Continuing Education Certificate
- Truck Driving (Commercial), Occupational Certificate
- Welding, Combination Welding, Continuing Education Certificate
- Welding, Sheet Metal Welder, Continuing Education Certificate

Plumbing and Pipefitting Technology, Continuing Education Certificate

Central and North Campuses
CE-PIPEFT
Course | Contact Hours
---|---
PFPB 1003 | 72
PFPB 1001 | 72
PFPB 1071 | 72
PFPB 2033 | 72
PFPB 2071 | 72
PFPB 2032 | 72
PFPB 2031 | 72

Certificate of Technology Total: 504

Truck Driving (Commercial), Occupational Certificate

Course Information
Day classes meet Monday through Thursday from 7 a.m. to 6 p.m. for six weeks. Weekend classes meet Saturdays and Sundays from 7 a.m. to 6 p.m. for 12 weeks. Each student will log approximately 300 miles of actual behind-the-wheel driving pulling empty and loaded trailers. Total truck maintenance and safety, Department of Transportation Federal Motor Carrier Safety Regulations and driving courtesy are covered. The commercial truck driving curriculum is designed to provide basic training in preparation for employment as a professional truck driver. A continuing education six-hour defensive driving course is also included.

Upon successful completion of the prescribed course work, students receive an occupational certificate and a Department of Transportation certification. These non-credit courses are approved for Veterans
Administration educational assistance. Job assistance is available to qualified students through the commercial truck driving department.

**Registration and Fees**
Registration is handled on a first-come, first-served basis. It is recommended that any interested students register early in order to guarantee a place in the class. Payment of the total cost of both courses is due upon registration. Students are asked to contact the department chair for the most recent costs. (Tuition, fees and contact hours are subject to change without notice.) For more information, call 281.476.1872.

**Admission Requirements**
Applicants for the San Jacinto College commercial truck driving courses must:

- Be at least 18 years of age and pass a mandatory drug test.
- Be in reasonably good physical condition and have no serious physical handicaps. (For guidelines, please read the Federal Motor Carrier Safety Regulations and Noise Emission Requirements, Chapter III—Federal Highway Administration, Department of Transportation—Subpart E—Physical Qualifications and Examinations—391.41)
- If born outside the U.S. or a graduate of a high school outside the U.S., all applicants must be able to provide adequate proof of competency in English or pass the English Proficiency Test administered by the Testing Center at the College. For appointments with the Testing Center, call 281.476.2025.
- If enrolling with an F-1 Visa, must be certified for English competency and be approved by the International Student Advisor, located in room 156 in the Central Campus Administration Building. For appointments with the advisor, call 281.476.1840.
- Have a valid Texas driver's license.
- Have a valid Social Security number.

**Central Campus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Contact Hours</th>
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**Occupational Certificate Total: 246**

**Capstone Experience:** Department of Transportation (DOT) Written and Driving Examination

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*Commercial truck driving courses are offered through the cooperation of the Industrial Technology Division and the Continuing Education Office. Students who successfully complete the above course(s) will receive credit in Continuing Education Units (CEUs) equal to 1.0 CEU per 10 contact hours in class.*
EDUCATION

Program Information
Do you have a passion for shaping the future? Do you desire to inspire the youth around you because of your passion? If so, San Jacinto College’s child development program is designed for students like you who want to have a profound, positive effect on society through our children. Our program offers the knowledge and technical skills you need to enter the child development profession and serves as a launching pad to a four-year bachelor’s degree program in education. Are you ready for the future?

The San Jacinto College child development/early childhood studies program:

- Is designed to develop basic skills, attitudes, and competencies necessary for personnel to provide high-quality care in a variety of early childhood programs.

Career Opportunities
Students who receive an Associate of Applied Science (AAS) in Child Development/Early Childhood Education pursue careers in:

- Teaching
- Directing and/or owning an early childhood program for profit or non-profit
- Teaching in a family day home setting
- Becoming a nanny
- Teaching in a church-related program or government facilities
- Working at a children’s museum
- Serving as a Child Life Specialist Assistant
- Working in an early childhood intervention program

Earning Potential
Preschool teacher median salary: $24,024
Education administrator, preschool and childcare median salary: $41,519

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central campus, 281-476-1867; or North campus, 281-459-7635.

Campus(es)
Central Campus
North Campus

Information
The Child Development/Early Childhood Education Associate of Applied Science degree curriculum is designed to develop basic skills, attitudes and competencies necessary for personnel to provide high-quality care and early education in preschools and child care centers.

CDEC and TECA Student
The 80th Texas Legislature passed a law, Senate Bill 758, that as of Sept. 1, 2007, requires a Federal Bureau of Investigation (FBI) fingerprint check for anyone who is currently required to have a background check in a child care center. This includes any person(s), including volunteers, who are counted in the child/caregiver ratio. Child care center employees/volunteers will have to have the background fingerprints once every two (2) years. Similar legislation, Senate Bill 9, passed setting 2011 as the deadline for public school districts to be in compliance. FBI fingerprinting allows the state to check an individual’s criminal record in 50 states, rather than just checking for a record within the state of Texas, which is all that our current system allows us to do. Additionally, it addresses concerns with individuals using fake names and social security numbers.

After some preliminary clarification, we have found that no student can be in any one location more than two (2) days a month, in which case they would not be a “frequent” in-contact person in the classroom. Our experience indicates that the area school districts are implementing criminal background checks in a variety of ways. A fee is required but may vary depending upon the center, program and school district. Based upon this information, it is the student’s responsibility as a future teacher of children in the state of Texas to understand and comply with the requirements of each institution in which they may observe and/or intern.

For further clarification, discuss any concerns or issues with your professor, counselor and/or department chair.
Occupational Certificate

The Child Development Associate Training for Director Occupational Certificate program has been designed to provide educational training for persons interested in teaching young children and/or directing child care centers. The certificate requires completion of 18 semester credit hours. Upon successful completion of the courses and upon receiving the Child Development Associate National Credential (CDA) from the Council of Early Childhood Recognition in Washington, D.C., the student meets director qualifications as set forth in the Texas Department of Protective and Regulatory Services Minimum Standards and Guidelines.

Plan of Study

Central and North Campuses
6CHID-DIR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>CDEC 1417</td>
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<td>CDEC 2422</td>
<td>Child Development Associate Training II</td>
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<td>CDEC 2424</td>
<td>Child Development Associate Training III</td>
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<tr>
<td>CDEC 2326</td>
<td>Administration of Programs for Children I</td>
<td>3</td>
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<tr>
<td>CDEC 2328</td>
<td>Administration of Programs for Children II</td>
<td>3</td>
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<td>18</td>
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</table>

**Capstone Experience:** CDEC 2328 Administration of Programs for Children II

---

**Child Development/Early Childhood Education, Associate of Applied Science**

- Is designed to develop basic skills, attitudes, and competencies necessary for personnel to provide high-quality care in a variety of early childhood programs.

**Career Opportunities**

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**Campus(es)**

Central Campus
North Campus

**Information**

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### Plan of Study

**Central and North Campuses**

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<thead>
<tr>
<th>Course</th>
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<td>CDEC 1319</td>
<td>Child Guidance</td>
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<td>CDEC 1458</td>
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**Credits** 16

**Second Term**

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<td>TECA 1311</td>
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<td>CDEC 1413</td>
<td>Curriculum Resources for Early Childhood Programs</td>
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<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td>CDEC 1323</td>
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**Credits** 16

**Third Term**

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<td>TECA 1303</td>
<td>Families, School and Community</td>
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<td>SPCH 1315</td>
<td>Public Speaking or Interpersonal Communications</td>
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<td>MATH 1314</td>
<td>College Algebra (or higher) or Contemporary Mathematics (Quantitative Reasoning)</td>
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<tr>
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**Credits** 16

**Fourth Term**

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<td>CDEC 2328</td>
<td>Administration of Programs for Children II</td>
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</tr>
<tr>
<td>CDEC 2366</td>
<td>Practicum (or Field Experience) - Child Care Provider/Assistant</td>
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**Social and Behavioral Sciences**

| Credits    | 12 |

**Total Credits** 60

### Approved Electives

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<td>CDEC 1417</td>
<td>Child Development Associate Training I</td>
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<td>CDEC 2341</td>
<td>The School Age Child</td>
<td>3</td>
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<tr>
<td>CDEC 2422</td>
<td>Child Development Associate Training II</td>
<td>4</td>
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<tr>
<td>CDEC 2424</td>
<td>Child Development Associate Training III</td>
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### Child Development/Early Childhood Education, Certificate of Technology

#### Program Information

Do you have a passion for shaping the future? Do you desire to inspire the youth around you because of your passion? If so, San Jacinto College’s child development program is designed for students like you who want to have a profound, positive effect on society through our children. Our program offers the knowledge and technical skills you need to enter the child development profession and serves as a launching pad to a four-year bachelor’s degree program in education. Are you ready for the future?

The San Jacinto College child development/early childhood studies program:

- Is designed to develop basic skills, attitudes, and competencies necessary for personnel to provide high-quality care in a variety of early childhood programs.

### Career Opportunities

Students who receive an Associate of Applied Science (AAS) in Child Development/Early Childhood Education pursue careers in:

- Teaching
- Directing and/or owning an early childhood program for profit or nonprofit
- Teaching in a family day home setting
- Becoming a nanny
- Teaching in a church-related program or government facilities
- Working at a children’s museum
- Serving as a Child Life Specialist Assistant
- Working in an early childhood intervention program

### Earning Potential

Preschool teacher median salary: $24,024

Education administrator, preschool and childcare median salary: $41,519

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1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.
Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central campus, 281-476-1867; or North campus, 281-459-7635.

Campus(es)
Central Campus
North Campus

Information
The Child Development/Early Childhood Education Associate of Applied Science degree curriculum is designed to develop basic skills, attitudes and competencies necessary for personnel to provide high-quality care and early education in preschools and child care centers.

CDEC and TECA Student
The 80th Texas Legislature passed a law, Senate Bill 758, that as of Sept. 1, 2007, requires a Federal Bureau of Investigation (FBI) fingerprint check for anyone who is currently required to have a background check in a child care center. This includes any person(s), including volunteers, who are counted in the child/caregiver ratio. Child care center employees/volunteers will have to have the background fingerprints once every two (2) years. Similar legislation, Senate Bill 9, passed setting 2011 as the deadline for public school districts to be in compliance. FBI fingerprinting allows the state to check an individual’s criminal record in 50 states, rather than just checking for a record within the state of Texas, which is all that our current system allows us to do. Additionally, it addresses concerns with individuals using fake names and social security numbers.

After some preliminary clarification, we have found that no student can be in any one location more than two (2) days a month, in which case they would not be a “frequent” in-contact person in the classroom. Our experience indicates that the area school districts are implementing criminal background checks in a variety of ways. A fee is required but may vary depending upon the center, program and school district. Based upon this information, it is the student’s responsibility as a future teacher of children in the state of Texas to understand and comply with the requirements of each institution in which they may observe and/or intern.

For further clarification, discuss any concerns or issues with your professor, counselor and/or department chair.

Plan of Study
Central and North Campuses
4CHID-ECE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>TECA 1354</td>
<td>Child Growth and Development</td>
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<td>CDEC 1319</td>
<td>Child Guidance</td>
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<td>TECA 1311</td>
<td>Educating Young Children</td>
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<td>CDEC 1413</td>
<td>Curriculum Resources for Early Childhood Programs</td>
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<td>CDEC 1356</td>
<td>Emergent Literacy for Early Childhood</td>
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<td>TECA 1318</td>
<td>Wellness of the Young Child</td>
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<td>CDEC 2407</td>
<td>Math and Science for Early Childhood</td>
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<tr>
<td>TECA 1326</td>
<td>Administration of Programs for Children I or Administration of Programs for Children II</td>
<td>3</td>
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<tr>
<td>CDEC 2366</td>
<td>Practicum (or Field Experience) - Child Care Provider/Assistant</td>
<td>3</td>
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Capstone Experience: CDEC 2366 Practicum (or Field Experience) - Child Care Provider/Assistant

Approved Electives

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<td>CDEC 1321</td>
<td>The Infant and Toddler</td>
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<td>CDEC 1417</td>
<td>Child Development Associate Training I</td>
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<tr>
<td>CDEC 2341</td>
<td>The School Age Child</td>
<td>3</td>
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<tr>
<td>CDEC 2422</td>
<td>Child Development Associate Training II</td>
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<tr>
<td>CDEC 2424</td>
<td>Child Development Associate Training III</td>
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Teaching - Early Childhood to 6th Grade, Associate of Arts in Teaching

Shape the Next Generation
The world needs more teachers, perhaps more than any other profession. Unlike most career paths, teaching is a calling; one that takes a unique personality willing to listen to, learn from and shape the students they will have in their classroom. If you feel an internal pull toward this field, obtaining an Associate of Arts in Teaching (AAT) degree from San Jacinto College is the best way to start.

Our AAT degree is fully transferable to all Texas public universities and lays the initial foundation needed for a Texas teacher certification. Students will be exposed to the full spectrum of primary education and can specialize in teaching elementary, middle or high school grade-level subjects. Students who complete the AAT will be required to meet any and all entrance requirements of the transferring university and the

San Jacinto College 2018-2019
educator preparation program, including grade point averages and/or testing requirements.

- EC-6 AAT – This degree pathway is for students who want to teach early childhood through 6th grade. Students will gain knowledge across multiple disciplines so that those certified under EC-6 will have the skills to teach reading, writing, math, science, and history.
- 7-12 History AAT – This degree pathway is for students who want to teach history in grade levels 7-12.
- 7-12 Life Science AAT - This degree pathway is for students who want to teach biology or other life science courses in grade levels 7-12.
- 7-12 ELA AAT- This degree pathway is for students who want to teach English Language Arts in grade levels 7-12.

**Career Information**

Early childhood (preschool) teachers $24,024
Elementary school teachers $60,409
Middle school teachers $60,335
High school (secondary) teachers $60,049

1 Source: www.texaswages.com, 2017 annual median salaries for Gulf Coast region

The Associate of Arts in Teaching (A.A.T.) is a Texas Higher Education Coordinating Board-approved collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The A.A.T. degree, as defined by the Coordinating Board, is fully transferable to all Texas public universities. Because the A.A.T. fulfills the requirements of the field of study curriculum statutes and Coordinating Board rules, all Texas public universities must accept the A.A.T. curricula if they offer the applicable baccalaureate degrees leading to initial teacher certification.

Students who complete the A.A.T. will be required to meet any and all entrance requirements of the receiving university and the educator preparation program, including grade point averages and/or testing requirements.

**All Campuses**

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<td>MATH 1350 &amp; MATH 1351</td>
<td>Mathematics for Teachers I (Fundamentals of Mathematics I) and Mathematics for Teachers II (Fundamentals of Mathematics II) (or equivalent)</td>
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<td>EDUC 1301</td>
<td>Introduction to the Teaching Profession</td>
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<td>EDUC 2301</td>
<td>Introduction to Special Populations</td>
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<tr>
<td>Additional science beyond Life and Physical Science</td>
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<td>PSYC 1300</td>
<td>Learning Framework</td>
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<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<tr>
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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<tr>
<td></td>
<td>Academic elective (if student passes the computer literacy exam)</td>
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**Communications**

Select two of the following: 6

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<thead>
<tr>
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<td>ENGL 1301</td>
<td>Composition I (required)</td>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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**Mathematics**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
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</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences</td>
<td>1</td>
</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences</td>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td>1</td>
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<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods (Statistics)</td>
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<tr>
<td>MATH 2318</td>
<td>Linear Algebra</td>
<td></td>
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<tr>
<td>MATH 2320</td>
<td>Differential Equations</td>
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<tr>
<td>MATH 2412</td>
<td>Pre-Calculus Math</td>
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<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
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<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
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**Life and Physical Sciences (Natural Science)**

Select two of the following: 6

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<tr>
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<tr>
<td>ASTR 1303</td>
<td>Stars and Galaxies (lecture)</td>
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<tr>
<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
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<tr>
<td>BIOL 1306</td>
<td>Biology for Science Majors I (Lecture)</td>
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<td>BIOL 1307</td>
<td>Biology for Science Majors II (Lecture)</td>
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<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (Lecture)</td>
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<tr>
<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (Lecture)</td>
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<tr>
<td>BIOL 1311</td>
<td>General Botany</td>
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<tr>
<td>BIOL 1313</td>
<td>General Zoology (Lecture)</td>
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<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<td>CHEM 1305</td>
<td>Introductory Chemistry I (lecture)</td>
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<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
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<tr>
<td>GEOL 1301</td>
<td>Earth Sciences for Non-Science Majors I (lecture)</td>
<td>4</td>
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<tr>
<td>GEOL 1303</td>
<td>Physical Geology (lecture)</td>
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<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
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<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
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<td>PHYS 1301</td>
<td>College Physics I (lecture)</td>
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<td>College Physics II (lecture)</td>
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<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
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<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
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**Language, Philosophy, and Culture (Humanities)**

Select one of the following: 3

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<tr>
<td>ENGL 2322</td>
<td>British Literature I</td>
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<tr>
<td>ENGL 2323</td>
<td>British Literature II</td>
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</table>
ENGL 2327 American Literature I  
ENGL 2328 American Literature II  
ENGL 2332 World Literature II  
ENGL 2341 Literature and Film  
ENGL 2351 Mexican American Literature  
GEOG 1302 Human Geography  
HIST 2321 World Civilization I  
HIST 2322 World Civilization II  
HUMA 1301 Introduction to the Humanities I  
PHIL 1301 Introduction to Philosophy  
PHIL 2306 Introduction to Ethics  

Creative Arts (Fine Arts)  
Select one of the following:  
- ARTS 1301 Art Appreciation  
- ARTS 1303 Art History I (Prehistoric to the 14th century)  
- ARTS 1304 Art History II (14th century to the present)  
- DANC 2303 Dance Appreciation  
- DRAM 1310 Introduction to Theatre  
- DRAM 2366 Introduction to Cinema: Film Appreciation I  
- MUSI 1306 Music Appreciation  
- MUSI 1307 Music Literature  
- MUSI 1310 American Music

American History  
Select two of the following:  
- HIST 1301 United States History I  
- HIST 1302 United States History II  
- HIST 2301 Texas History  
- HIST 2327 Mexican American History I  
- HIST 2328 Mexican American History II

Government/Political Science  
Select two of the following:  
- GOVT 2305 Federal Government (Federal Constitution and Topics)  
- GOVT 2306 Texas Government (Texas Constitution and Topics)

Social and Behavioral Sciences  
Select one of the following:  
- ANTH 2302 Introduction to Archaeology  
- ANTH 2346 General Anthropology  
- ANTH 2351 Cultural Anthropology  
- ECON 2301 Principles of Macroeconomics  
- ECON 2302 Principles of Microeconomics  
- GEOG 1303 World Regional Geography  
- GOVT 2304 Introduction to Political Science  
- HIST 2311 Western Civilization I  
- HIST 2312 Western Civilization II  
- PSYC 2301 General Psychology  
- SOCI 1301 Introduction to Sociology  
- SOCI 2319 Minority Studies I

Component Area Option  
Select two of the following:  
- SPCH 1311 Introduction to Speech Communication  
- SPCH 1315 Public Speaking  
- SPCH 1318 Interpersonal Communications  
- SPCH 1321 Business and Professional Speech  
- PHED 1164 Introduction to Physical Fitness and Wellness  
- CHIN 1411 Beginning Chinese I  
- CHIN 1412 Beginning Chinese II  
- FREN 1411 Beginning French I  
- FREN 1412 Beginning French II  
- GERM 1411 Beginning German I  
- GERM 1412 Beginning German II  
- SGNL 1401 Beginning American Sign Language I  
- SGNL 1402 Beginning American Sign Language II  
- SPAN 1411 Beginning Spanish I  
- SPAN 1412 Beginning Spanish II

Total Credits 48

1. MATH 1324 Mathematics for Business and Social Sciences,  
   MATH 1325 Calculus for Business and Social Sciences, and MATH 1332  
   Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. MATH 1342 is required for a bachelor's degree in nursing.

4. BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309  
   Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.

5. BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302  
   Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.

6. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

7. 2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution’s core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core.

Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

San Jacinto College 2018-2019
Teaching - Grades 7 to 12, Associate of Arts in Teaching

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- 7-12 History AAT – This degree pathway is for students who want to teach history in grade levels 7-12.
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Career Information

Early childhood (preschool) teachers $24,024
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Middle school teachers $60,335
High school (secondary) teachers $60,049

Source: www.texaswages.com (https://publications.sanjac.edu/areas-study/education/teaching-grades-7-12-aat/www.texaswages.com) 2017 annual median salaries for Gulf Coast region

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All Campuses

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<tr>
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<tbody>
<tr>
<td>EDUC 1301</td>
<td>Introduction to the Teaching Profession</td>
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<td>EDUC 2301</td>
<td>Introduction to Special Populations</td>
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<td>PSYC 1300</td>
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<tr>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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Mathematics

Select one of the following:

- MATH 1314 College Algebra
- MATH 1316 Plane Trigonometry
- MATH 1324 Mathematics for Business and Social Sciences
- MATH 1325 Calculus for Business and Social Sciences
- MATH 1332 Contemporary Mathematics (Quantitative Reasoning)
- MATH 1342 Elementary Statistical Methods (Statistics)
- MATH 2318 Linear Algebra
- MATH 2320 Differential Equations
- MATH 2412 Pre-Calculus Math
- MATH 2413 Calculus I
- MATH 2414 Calculus II

Life and Physical Sciences (Natural Science)

Select two of the following:

- ASTR 1303 Stars and Galaxies (lecture)
- ASTR 1304 The Solar System (lecture)
- BIOL 1306 Biology for Science Majors I (Lecture)
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<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (Lecture)</td>
<td>BIOL 1313</td>
<td>General Zoology</td>
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<tr>
<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (Lecture)</td>
<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<td>BIOL 1311</td>
<td>General Botany</td>
<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<tr>
<td>CHEM 1305</td>
<td>Introductory Chemistry I (lecture)</td>
<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<tr>
<td>GEOL 1301</td>
<td>Earth Sciences for Non-Science Majors I (lecture)</td>
<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
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<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
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<td>College Physics I (lecture)</td>
<td>PHYS 1302</td>
<td>College Physics II (lecture)</td>
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<tr>
<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
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<td>ENGL 2322</td>
<td>British Literature I</td>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
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<td>ENGL 2323</td>
<td>British Literature II</td>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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<td>ENGL 2327</td>
<td>American Literature I</td>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
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<td>ENGL 2328</td>
<td>American Literature II</td>
<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
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<td>ENGL 2332</td>
<td>World Literature I</td>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
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<td>ENGL 2333</td>
<td>World Literature II</td>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
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<td>ENGL 2341</td>
<td>Literature and Film</td>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
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<td>ENGL 2351</td>
<td>Mexican American Literature</td>
<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation I</td>
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<tr>
<td>GEOG 1302</td>
<td>Human Geography</td>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
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<td>HIST 2321</td>
<td>World Civilization I</td>
<td>MUSI 1307</td>
<td>Music Literature</td>
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<td>HIST 2322</td>
<td>World Civilization II</td>
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<td>American Music</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>SPCH 1315</td>
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<td>Introduction to Ethnography</td>
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<td>Interpersonal Communications</td>
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<td>Introduction to Philosophy</td>
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<td>Business and Professional Speech</td>
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<td>HIST 1301</td>
<td>United States History I</td>
<td>PHED 1164</td>
<td>Introduction to Physical Fitness and Wellness</td>
</tr>
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<td>HIST 1302</td>
<td>United States History II</td>
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<td>HIST 2301</td>
<td>Texas History</td>
<td>CHIN 1412</td>
<td>Beginning Chinese II</td>
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<tr>
<td>HIST 2302</td>
<td>Texas History</td>
<td>FREN 1411</td>
<td>Beginning French I</td>
</tr>
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<td>HIST 2307</td>
<td>Mexican American History I</td>
<td>FREN 1412</td>
<td>Beginning French II</td>
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<td>HIST 2308</td>
<td>Mexican American History II</td>
<td>GERM 1411</td>
<td>Beginning German I</td>
</tr>
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<td>HIST 2309</td>
<td>Mexican American History III</td>
<td>GERM 1412</td>
<td>Beginning German II</td>
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<td>HIST 2310</td>
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<td>SGNL 1401</td>
<td>Beginning American Sign Language I</td>
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<td>HIST 2311</td>
<td>Mexican American History V</td>
<td>SGNL 1402</td>
<td>Beginning American Sign Language II</td>
</tr>
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<td>HIST 2312</td>
<td>Mexican American History VI</td>
<td>SPAN 1411</td>
<td>Beginning Spanish I</td>
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<td>HIST 2313</td>
<td>Mexican American History VII</td>
<td>SPAN 1412</td>
<td>Beginning Spanish II</td>
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</tbody>
</table>

**Language, Philosophy, and Culture (Humanities)**

Select one of the following: 3
- ENGL 2322 British Literature I
- ENGL 2323 British Literature II
- ENGL 2327 American Literature I
- ENGL 2328 American Literature II
- ENGL 2332 World Literature I
- ENGL 2333 World Literature II
- ENGL 2341 Literature and Film
- ENGL 2351 Mexican American Literature
- GEOG 1302 Human Geography
- HIST 2321 World Civilization I
- HIST 2322 World Civilization II
- HUMA 1301 Introduction to the Humanities I
- HUMA 1302 Introduction to the Humanities II
- PHIL 1301 Introduction to Philosophy
- PHIL 2306 Introduction to Ethics

**Creative Arts (Fine Arts)**

Select one of the following: 3
- ARTS 1301 Art Appreciation
- ARTS 1303 Art History I (Prehistoric to the 14th century)
- ARTS 1304 Art History II (14th century to the present)
- DANC 2303 Dance Appreciation
- DRAM 1310 Introduction to Theatre
- DRAM 2366 Introduction to Cinema: Film Appreciation I
- MUSI 1306 Music Appreciation
- MUSI 1307 Music Literature
- MUSI 1310 American Music

**American History**

Select two of the following: 6
- HIST 1301 United States History I
- HIST 1302 United States History II
- HIST 2301 Texas History
- HIST 2307 Mexican American History I
- HIST 2308 Mexican American History II

**Government/Political Science**

Select two of the following: 6
- GOVT 2305 Federal Government (Federal Constitution and Topics)
- GOVT 2306 Texas Government (Texas Constitution and Topics)

**Social and Behavioral Sciences**

Select one of the following: 3
- ANTH 2302 Introduction to Archaeology
- ANTH 2346 General Anthropology
- ANTH 2351 Cultural Anthropology
- ECON 2301 Principles of Macroeconomics
- ECON 2302 Principles of Microeconomics
- GEOG 1303 World Regional Geography
- GOVT 2304 Introduction to Political Science
- HIST 2311 Western Civilization I
- HIST 2312 Western Civilization II
- PSYC 2301 General Psychology
- SOCI 1301 Introduction to Sociology
- SOCI 2319 Minority Studies I

**Component Area Option**

Select two of the following: 7
- SPCH 1311 Introduction to Speech Communication
- SPCH 1315 Public Speaking
- SPCH 1318 Interpersonal Communications
- SPCH 1321 Business and Professional Speech
- PHED 1164 Introduction to Physical Fitness and Wellness
- CHIN 1411 Beginning Chinese I
- CHIN 1412 Beginning Chinese II
- FREN 1411 Beginning French I
- FREN 1412 Beginning French II
- GERM 1411 Beginning German I
- GERM 1412 Beginning German II
- SGNL 1401 Beginning American Sign Language I
- SGNL 1402 Beginning American Sign Language II
- SPAN 1411 Beginning Spanish I
- SPAN 1412 Beginning Spanish II

**Total Credits** 48

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1. *MATH 1324 Mathematics for Business and Social Sciences*, *MATH 1325 Calculus for Business and Social Sciences*, and *MATH 1332 Contemporary Mathematics (Quantitative Reasoning)* are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. *MATH 1342 is required for a bachelor's degree in nursing.*

4. *BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.*

5. *BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.*
Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.
HEALTH SCIENCES

• Dietetics, Food Service Management, Certificate of Technology
• Dietetics, School Food Service Specialty, Occupational Certificate
• Emergency Medical Technology, Associate of Applied Science
• Emergency Medical Technology, Level 2 Certificate of Technology
• Eye Care Technology, Associate of Applied Science
• Eye Care Technology, Certificate of Technology
• Eye Care, Optician Preparatory, Occupational Certificate
• Health Information Management, Associate of Applied Science
• Health Information Mgmt, Cancer Data Management Specialty, Associate of Applied Science
• Health Information Mgmt, Cancer Data Management, Advanced Technical Certificate
• Health Information Mgmt, Medical Billing, Certificate of Technology
• Health Information Mgmt, Medical Coding Specialist, Level 2 Certificate
• Health Science Medical Assisting Pathway, Associate of Applied Science
• Health Science Pharmacy Technician Pathway, Associate of Applied Science
• Health Science Vocational Nursing Pathway, Associate of Applied Science
• Kinesiology, Associate of Arts
• Medical Assisting, Certificate of Technology
• Medical Imaging, Computed Tomography, Enhanced Skills Certificate
• Medical Imaging, Diagnostic Medical Sonography, Associate of Applied Science
• Medical Imaging, Invasive Cardiovascular Technology, Advanced Technical Certificate
• Medical Imaging, Invasive Cardiovascular Technology, Associate of Applied Science
• Medical Imaging, Magnetic Resonance Imaging, Advanced Technical Certificate
• Medical Imaging, Mammography, Enhanced Skills Certificate
• Medical Laboratory Technology, Associate of Applied Science
• Medical Laboratory Technology, Microscopic Tissue Anatomy, Advanced Technical Certificate
• Medical Radiography, Associate of Applied Science
• Mental Health Clinical and Counseling Psychology, Associate of Applied Science
• Mental Health Technician, Occupational Certificate
• Mental Health, Substance Abuse Counseling, Level 2 Certificate
• Mental Health, Substance Abuse Prevention Specialist, Occupational Certificate
• Mental Health-Substance Abuse Counseling, Occupational Certificate
• Nursing, Associate Degree Nursing, Generic Program, Associate of Applied Science
• Nursing, LVN/Paramedic to RN Transition Nursing, Associate of Applied Science
• Nursing, Vocational Nursing, Level 2 Certificate
• Occupational Therapy Assistant, Associate of Applied Science
• Pharmacy Technician, Certificate of Technology
• Physical Education Personal Trainer, Certificate of Technology
• Physical Therapist Assistant, Associate of Applied Science
• Respiratory Care, Associate of Applied Science
• Surgical Technology, Associate of Applied Science
• Surgical Technology, Certificate of Technology

Dietetics, Food Service Management, Certificate of Technology

Program Information

The San Jacinto College dietary management program is approved by the Association of Nutrition & Foodservice Professionals (ANFP). The program includes two semesters of classroom instruction and 150 hours of hands-on practice in nutrition and foodservice management. Upon completion of the program, students qualify to take the certified dietary managers (CDM) and certified food protection professionals (CFPP) certification exam.

CDMs and CFPPs are nationally recognized experts at managing dietary operations. Many work in health care—nursing facilities, rehab facilities, senior living communities, or hospitals. Others work in correctional facilities, schools, the military, and corporations.
CDMs are trained and qualified to manage menus, food purchasing, and food preparation and to apply nutrition principles, document nutrition information, ensure food safety, manage work teams, and more.

**Additional Information**

Students who successfully complete the two-term program will receive a certificate from San Jacinto College and may qualify to take the certification exam.

The College encourages students to obtain student membership in ANFP; professional membership is available after completion of the program.

CDMs and CFPPs have passed a nationally recognized credentialing exam offered by the Certifying Board for Dietary Managers. Continuing education is required to maintain these credentials.

For additional information, call the Association of Nutrition & Foodservice Professionals at 800-323-1908 or visit the website www.ANFPonline.org (http://www.ANFPonline.org)

*Students entering the program should be employed in a food service position and have the approval and participation of a registered dietitian as preceptor who must directly supervise 25 of the 50 nutrition-related field experience hours and coordinate the entire 150 hours.*

**Career Opportunities**

Students who attain a Marketable Skills Achievement Award pursue employment in:

- Retirement communities
- Long-term care facilities
- Hospitals
- Correctional facilities
- Schools
- Military

**Earning Potential**

Dietitians and Nutritionists median salary $57,305¹  

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-542-2099.

**Campus**

Central Campus

**Plan of Study**

**Central Campus**  
4DIET-FSVC

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CHEF 1205</td>
<td>Sanitation and Safety</td>
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<td>CHEF 1401</td>
<td>Basic Food Preparation</td>
<td>4</td>
</tr>
<tr>
<td>CHEF 1313</td>
<td>Food Service Operation/Systems</td>
<td>3</td>
</tr>
<tr>
<td>DITA 1400</td>
<td>Dietary Manager I</td>
<td>4</td>
</tr>
<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
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**Second Term**

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<td>or HECO 1322</td>
<td>or Nutrition and Diet Therapy</td>
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<tr>
<td>RSTO 1325</td>
<td>Purchasing for Hospitality Operations</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 2365</td>
<td>Practicum (or Field Experience) - Restaurant, Culinary, and Catering Management/Manager</td>
<td>3</td>
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<tr>
<td>or CHEF 2365</td>
<td>or Practicum (or Field Experience) - Culinary Arts/Chef Training</td>
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<tr>
<td>RSTO 2301</td>
<td>Principles of Food and Beverage Control</td>
<td>3</td>
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<td>RSTO 2405</td>
<td>Management of Food Production and Service</td>
<td>4</td>
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</tr>
<tr>
<td></td>
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</table>

**Capstone Experience:** RSTO 2365 Practicum (or Field Experience) - Restaurant, Culinary, and Catering Management/Manager or CHEF 2365 Practicum (or Field Experience) - Culinary Arts/Chef Training

**Dietetics, School Food Service Specialty, Occupational Certificate**

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- Hospitals
- Correctional facilities
- Schools
- Military

**Earning Potential**

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1 Source: texawages.com (http://texawages.com), Gulf Coast region, 2017

For more information, please contact 281-542-2099.

**Campus**

Central Campus

**Plan of Study**

Central Campus

6DIEL-SFSV

<table>
<thead>
<tr>
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<td>IFWA 1318</td>
<td>Nutrition for the Food Service Professional</td>
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<td>or HECO 1322</td>
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<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
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<td>CHEF 1401</td>
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**Second Term**

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<tr>
<td>CHEF 1313</td>
<td>Food Service Operation/Systems</td>
<td>3</td>
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<tr>
<td>RSTO 2405</td>
<td>Management of Food Production and Service</td>
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</tr>
</tbody>
</table>

**Total Credits**

17

**Emergency Medical Technology, Associate of Applied Science**

**Program Information**

Have you always wanted a career helping others? Are you passionate about making a difference? An emergency medical services (EMS) certificate from San Jacinto College can prepare you for certification in a health care field that can lead to a career in EMS or other related fields. Each year in the US, about 240 million calls are made to 911 for emergency medical assistance, which means just about every minute someone urgently needs help, your help. If you qualify, next time you could be the one receiving a call for emergency help. Are you ready?

The San Jacinto College emergency medical technology program:

- Combines classroom lectures and lab skills with real time clinical patient treatment experience in hospitals and on ambulances. EMS training at San Jacinto College utilizes modern classroom facilities and state-of-the-art skills laboratory equipment to prepare students to be competent and qualified emergency medical personnel;
- Provides live hospital clinical and 911 ambulance (EMS) patient-care experiences to give students practical experience in the workplace during training. Students apply knowledge and skills learned in the classroom in real life patient treatment situations, supervised by experienced clinical faculty and preceptors; and
- Is taught by faculty carefully selected based on their knowledge, teaching abilities, previous education, and EMS field experience. San Jacinto College EMS faculty are committed to student success by providing quality education and training. Many are well known and highly respected throughout the EMS community.

**Accreditation**

The San Jacinto College Emergency Medical Technician Program is accredited by:

The Commission on Accreditation of Allied Health Education Programs (www.caahp.org (http://www.caahp.org)) upon the recommendation of Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
The San Jacinto College Emergency Medical Technician Program is overseen by and granted approval from:

The Texas Department of State Health Services, Office of EMS/Trauma Systems Coordination
The Exchange Building
8407 Wall Street, Suite N-410
Austin, TX 78754
512-834-6700

Certification testing for EMS certification is done through the National registry of EMTs:
Rocco V. Morando Building
6610 Busch Blvd.
Columbus, Ohio 43229
614-888-4484

Why is this information important? Click here (https://vimeo.com/152497126) for a short video explaining the importance of accreditation.

Career Opportunities
Graduates of our program have numerous opportunities for employment and growth in their education. Although career placement as a certified EMT, Advanced EMT, or paramedic does not require the completion of an associate degree, students who do complete the degree have greater career opportunities and are eligible to become licensed paramedics by the Texas Department of State Health Services.

Most graduates continue their careers in the EMS field and are employed by:

- Public agencies such as municipal or county 911 EMS, fire departments, and police departments (SWAT Tactical Medics)
- Private EMS services
- Hospitals
- Helicopter or fixed-wing air ambulance services
- Staff medics with offshore oil and gas exploration companies
- Contractors working in developing and recovering countries

* Source: EMS Workforce for the 21st Century: A National Assessment

Graduate opportunities may also extend beyond traditional EMS roles:

- Nursing
- Law Enforcement
- Firefighting

Earning Potential
Emergency Medical Technician & Paramedics median salary $31,847 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 ext. 7741.

Campuses
Central Campus
North Campus

Information
The goal of the EMT Program at SJC is to prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, with exit points at the Emergency Medical Technician-Intermediate, and Emergency Medical Technician-Basic levels. The emergency medical technology (EMT) curriculum includes a combination of class lectures, skills training and clinical training in hospital and ambulance settings.

The EMT program at San Jacinto Community College District meets Texas Department of State Health Services (TDSHS) and the National Registry of EMT requirements for certification eligibility. Upon successful completion of the program, students registering for the emergency medical technology program must meet TDSHS requirements and be eligible to take the National Registry of EMT certification examination. Any applicant convicted of a felony and/or misdemeanor offense may be eligible for clinical participation and/or state certification.

North Campus is accredited by:
Texas Department of State Health Services EMS and Trauma Systems
1100 West 49th Street
Austin, TX 78755-3199
Office: (512) 458-7111; and
Commission on Accreditation of Allied Health Education Programs (CAAHEP), through the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP)
8301 Lakeview Parkway
Suite 111-312
Rowlett, Texas 75088
Office: (214) 703-8445, Fax: (214) 703-8992.

Central Campus is accredited by:
Texas Department of State Health Services EMS and Trauma Systems
1100 West 49th Street
Austin, TX 78755-3199
Office: (512) 458-7111
Program Enrollment

A criminal background check and/or drug screening is required of all health science students attending clinical courses or practicums and may be required prior to admission to the program.

Students must meet all program requirements for eligibility to take the National Registry certification examination. A fee is charged by the TDSHS and the National Registry of EMT for certification and/or examinations. There may also be additional charges for field experiences.

For information on course offerings and enrollment requirements, contact the emergency medical technology program director on North or Central Campus.

Emergency Medical Technology Program Requirements

EMS practitioners are held to the highest standards of professional and ethical conduct. This expectation extends to education programs, their faculty, students, clinical affiliates and EMS services. Students and prospective students must be able to demonstrate good professional characteristics to be eligible for entry and licensure with TDSHS.

Texas Administration Code Background Statement

**Note:** Pursuant to Rule 157.12 for the Texas Administrative Code (TAC), a person who has any arrests, criminal charges or indictments, criminal investigations, motions to revoke probation, etc. of any crime may be disqualified from obtaining licensure as an EMS Professional.

If you have any questions regarding past incidents, contact the TDSHS at their website https://www.dshs.state.tx.us/emstraumasystems/default.shtm or you can call them at (512) 834-6700. A criminal background check and/or drug screen must been conducted by a designated investigative agency at the expense of the student. This background check must be completed before registering for classes and only those applicants with a clear background will be eligible to register unless a qualified exception is made by the Program Director.

EMT Program Information Sessions

Spring Semester Mandatory Orientation

All EMT students registered for courses (new and returning) must attend one of the sessions below:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>January 7, 2019 - 2:00 - 5:30 P.M.</td>
<td>Allied Health Bldg. N-17.2010</td>
</tr>
<tr>
<td>January 8, 2019 - 9:00 A.M. - 12:30 P.M.</td>
<td>Allied Health Bldg. N-17.2010</td>
</tr>
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</table>

The State of Texas and our EMS program require you provide a current (within 1 year) criminal background check and drug screen. Our program utilizes a third party vendor to obtain these records. You can order your background and drug screen at www.castlebranch.com using the package code SQ29. This package also includes review of all of your immunizations records (please see requirements below) and physical form. The package costs $86.00. Please purchase the account prior to the start of class.

Update Immunizations

All immunizations must be current and must not expire during the program.

- Tetanus (td/tdap) [within the past 10 years]
- TB (PPD) skin test, Chest X-ray, or Quantiferon test [within the past year]
- Seasonal flu shot or proof of allergy to the flu shot
- 2 MMR shots or titer that shows immunity
- 2 Varicella shots or titer that shows immunity
- HEP B series of 3 shots or titer that shows immunity
- HEP C Antibody

Order Background Check and Drug Screen

Students must submit results from a background investigation. This process can be done through Castle Branch at www.castlebranch.com (http://www.castlebranch.com). Package Code: SQ29

**All EMT program students must purchase and complete CastleBranch requirements before the start of class.**

Physical Examination

Applicants must pass a program approved physical. The physical form is available below:

Click here for EMT program physical form (http://www.sanjac.edu/sites/default/files/PHYSICAL%202.0.pdf)

All EMT students will be required to purchase the "Nav2 Premier Package" access code along with either the e-book or printed textbook package. The college bookstore has books available for you to purchase or you may purchase them at a vendor of your choice.

- EMT Basic Textbook: Emergency Care and Transportation of the Sick and Injured 11th Edition w/ Navigate 2 Premier Access
- EMT Advanced and Paramedic Textbook: Nancy Caroline’s Emergency Care in the Streets 8th Edition w/ Navigate 2 Premier Access

Paramedic Program Student Outcomes

Upon completion of the paramedic program, the student is eligible to sit for the NREMT Certification Examination.

The three-year outcome report is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Pass Rate</th>
<th>Retention Rate</th>
<th>Positive Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>61%</td>
<td>86%</td>
<td>83%</td>
</tr>
<tr>
<td>2016</td>
<td>88%</td>
<td>68%</td>
<td>53%</td>
</tr>
<tr>
<td>2017</td>
<td>43%</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td>3-year avg.</td>
<td>64%</td>
<td>73.66%</td>
<td>78.66%</td>
</tr>
</tbody>
</table>

Pass rate is based on first-time attempt.

The positive placement rate, as defined by CAAHEP based on graduates of the paramedic program who are reporting working in either a full-time or part-time position as a paramedic within twelve months of graduation, continuing their education, or serving in the military.

San Jacinto College 2018-2019
## Plan of Study

### Central and North Campuses

#### 3EMT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMSP 1501</td>
<td>Emergency Medical Technician</td>
<td>5</td>
</tr>
<tr>
<td>EMSP 1160</td>
<td>Clinical-Emergency Medical Technician</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2301  &amp; BIOL 2101</td>
<td>Human Anatomy and Physiology I (Lecture) and Human Anatomy and Physiology I (Lab)</td>
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</table>

**Credits**: 13

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<thead>
<tr>
<th>Second Term</th>
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<tbody>
<tr>
<td>EMSP 1338</td>
<td>Introduction to Advanced Practice</td>
<td>3</td>
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<tr>
<td>EMSP 1356</td>
<td>Patient Assessment and Airway Management</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 1355</td>
<td>Trauma Management</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 1260</td>
<td>Clinical - Advanced Emergency Medical Technology</td>
<td>2</td>
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<tr>
<td>BIOL 2302   &amp; BIOL 2102</td>
<td>Human Anatomy and Physiology II (Lecture) and Human Anatomy and Physiology II (Lab)</td>
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</table>

**Credits**: 15

<table>
<thead>
<tr>
<th><strong>Third Term</strong></th>
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</thead>
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<tr>
<td>EMSP 2444</td>
<td>Cardiology</td>
<td>4</td>
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<tr>
<td>EMSP 2206</td>
<td>Emergency Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>EMSP 2237</td>
<td>Emergency Procedures</td>
<td>2</td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
<td>3</td>
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**Credits**: 14

<table>
<thead>
<tr>
<th><strong>Fourth Term</strong></th>
<th></th>
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<tbody>
<tr>
<td>EMSP 2434</td>
<td>Medical Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 2330</td>
<td>Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 2262</td>
<td>Clinical - EMT Paramedic II</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
<td>3</td>
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</tbody>
</table>

**Credits**: 14

<table>
<thead>
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<th><strong>Summer Year Two Term</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>EMSP 2243</td>
<td>Assessment Based Management</td>
<td>2</td>
</tr>
<tr>
<td>EMSP 2205</td>
<td>EMS Operations</td>
<td>2</td>
</tr>
<tr>
<td>EMSP 2268</td>
<td>Emergency Medical Technician Paramedic Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

**Credits**: 6

**Total Credits**: 60

### Capstone Experience: EMSP 2268 Emergency Medical Technician Paramedic Practicum

**Note**: Students must pass each course listed in the degree or certificate for Emergency Medical Technology with a grade of C or higher to be eligible to receive a degree or certificate.

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## Emergency Medical Technology, Level 2 Certificate of Technology

### Program Information

Have you always wanted a career helping others? Are you passionate about making a difference? An emergency medical services (EMS) certificate from San Jacinto College can prepare you for certification in a health care field that can lead to a career in EMS or other related fields. Each year in the US, about 240 million calls are made to 911 for emergency medical assistance, which means just about every minute someone urgently needs help, your help. If you qualify, next time you could be the one receiving a call for emergency help. Are you ready?

The San Jacinto College emergency medical technology program:

- Combines classroom lectures and lab skills with real time clinical patient treatment experience in hospitals and on ambulances. EMS training at San Jacinto College utilizes modern classroom facilities and state-of-the-art skills laboratory equipment to prepare students to be competent and qualified emergency medical personnel;
- Provides live hospital clinical and 911 ambulance (EMS) patient-care experiences to give students practical experience in the workplace during training. Students apply knowledge and skills learned in the classroom in real life patient treatment situations, supervised by experienced clinical faculty and preceptors; and
- Is taught by faculty carefully selected based on their knowledge, teaching abilities, previous education, and EMS field experience. San Jacinto College EMS faculty are committed to student success by providing quality education and training. Many are well known and highly respected throughout the EMS community.

### Accreditation

The San Jacinto College Emergency Medical Technician Program is accredited by:

The Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 158
Clearwater, FL 33756
727-210-2350
www.caahep.org

Continuing Education activities are accredited by:
Commission on Accreditation for Pre-Hospital Continuing Education (CAPCE)
12300 Ford Road, Suite 350
Dallas, TX 75234
972-247-4442

The San Jacinto College Emergency Medical Technician Program is overseen by and granted approval from:

The Texas Department of State Health Services, Office of EMS/Trauma Systems Coordination
The Exchange Building
8407 Wall Street, Suite N-410
Austin, TX 78754
512-834-6700

Certification testing for EMS certification is done through the National registry of EMTs:
Rocco V. Morando Building
6610 Busch Blvd.
Columbus, Ohio 43229
614-888-4484

Why is this information important? Click here (https://vimeo.com/152497126) for a short video explaining the importance of accreditation.

Career Opportunities

Graduates of our program have numerous opportunities for employment and growth in their education. Although career placement as a certified EMT, Advanced EMT, or paramedic does not require the completion of an associate degree, students who do complete the degree have greater career opportunities and are eligible to become licensed paramedics by the Texas Department of State Health Services.

Most graduates continue their careers in the EMS field and are employed by:

- Public agencies such as municipal or county 911 EMS, fire departments, and police departments (SWAT Tactical Medics)
- Private EMS services
- Hospitals
- Helicopter or fixed-wing air ambulance services
- Staff medics with offshore oil and gas exploration companies
- Contractors working in developing and recovering countries

* Source: EMS Workforce for the 21st Century: A National Assessment

Graduate opportunities may also extend beyond traditional EMS roles:

- Nursing
- Law Enforcement
- Firefighting
- Occupational Health and Safety
- Health Care Administration
- Education
- Physician Assistant or Medical Doctor

Earning Potential

Emergency Medical Technician & Paramedics median salary $31,847 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 ext. 7741.

Campuses

Central Campus
North Campus

Information

The goal of the EMT Program at SJC is to prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, with exit points at the Emergency Medical Technician-Intermediate, and Emergency Medical Technician-Basic levels. The emergency medical technology (EMT) curriculum includes a combination of class lectures, skills training and clinical training in hospital and ambulance settings.

The EMT program at San Jacinto Community College District meets Texas Department of State Health Services (TDSHS) and the National Registry of EMT requirements for certification eligibility. Upon successful completion of the program, students registering for the emergency medical technology program must meet TDSHS requirements and be eligible to take the National Registry of EMT certification examination. Any applicant convicted of a felony and/or misdemeanor offense may be eligible for clinical participation and/or state certification.

North Campus is accredited by:
Texas Department of State Health Services EMS and Trauma Systems
1100 West 49th Street
Austin, TX 78765-3199
Office: (512) 458-7111; and
Commission on Accreditation of Allied Health Education Programs (CAAHEP), through the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP)
8301 Lakeview Parkway
Suite 111-312
Rowlett, Texas 75088
Office: (214) 703-8445, Fax: (214) 703-8992.

Central Campus is accredited by:
Texas Department of State Health Services EMS and Trauma Systems
1100 West 49th Street
Austin, TX 78765-3199
Office: (512) 458-7111

Program Enrollment

A criminal background check and/or drug screening is required of all health science students attending clinical courses or practicums and may be required prior to admission to the program.

Students must meet all program requirements for eligibility to take the National Registry certification examination. A fee is charged by
the TDSHS and the National Registry of EMT for certification and/or examinations. There may also be additional charges for field experiences.

For information on course offerings and enrollment requirements, contact the emergency medical technology program director on North or Central Campus.

**Emergency Medical Technology Program Requirements**

EMS practitioners are held to the highest standards of professional and ethical conduct. This expectation extends to education programs, their faculty, students, clinical affiliates and EMS services. Students and prospective students must be able to demonstrate good professional characteristics to be eligible for entry and licensure with TDSHS.

**Texas Administration Code Background Statement**

**Note:** Pursuant to Rule 157.12 for the Texas Administrative Code (TAC), a person who has any arrests, criminal charges or indictments, criminal investigations, motions to revoke probation, etc. of any crime may be disqualified from obtaining licensure as an EMS Professional.

If you have any questions regarding past incidents, contact the TDSHS at their website https://www.dshs.state.tx.us/emstraumasystems/default.shtm or you can call them at (512) 834-6700. A criminal background check and/or drug screen must be conducted by a designated investigative agency at the expense of the student. This background check must be completed before registering for classes and only those applicants with a clear background will be eligible to register unless a qualified exception is made by the Program Director.

**EMT Program Information Sessions**

**Spring Semester Mandatory Orientation**

All EMT students registered for courses (new and returning) must attend one of the sessions below:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7, 2019 - 2:00 - 5:30 P.M.</td>
<td>Allied Health Bldg. N-17.2010</td>
</tr>
<tr>
<td>January 8, 2019 - 9:00 A.M. - 12:30 P.M.</td>
<td>Allied Health Bldg. N-17.2010</td>
</tr>
</tbody>
</table>

The State of Texas and our EMS program require you provide a current (within 1 year) criminal background check and drug screen. Our program utilizes a third party vendor to obtain these records. You can order your background and drug screen at www.castlebranch.com using the package code SQ29. This package also includes review of all of your immunizations records (please see requirements below) and physical form. The package costs $86.00. Please purchase the account prior to the start of class.

**Update Immunizations**

All immunizations must be current and must not expire during the program.

- Tetanus (td/tdap) [within the past 10 years]
- TB (PPD) skin test, Chest X-ray, or Quantiferon test [within the past year]
- Seasonal flu shot or proof of allergy to the flu shot
- 2 MMR shots or titer that shows immunity
- 2 Varicella shots or titer that shows immunity
- HEP B series of 3 shots or titer that shows immunity
- HEP C Antibody

**Order Background Check and Drug Screen**

Students must submit results from a background investigation. This process can be done through Castle Branch at castelbranch.com. Package Code: SQ29

**All EMT program students must purchase and complete CastleBranch requirements before the start of class.**

**Physical Examination**

Applicants must pass a program approved physical. The physical form is available below:

Click here for EMT program physical form [http://www.sanjac.edu/sites/default/files/PHYSICAL%202.0.pdf]

All EMT students will be required to purchase the "Nav2 Premier Package" access code along with either the e-book or printed textbook package. The college bookstore has books available for you to purchase or you may purchase them at a vendor of your choice.


**Paramedic Program Student Outcomes**

Upon completion of the paramedic program, the student is eligible to sit for the NREMT Certification Examination.

The three-year outcome report is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Pass Rate</th>
<th>Retention Rate</th>
<th>Positive Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>61%</td>
<td>86%</td>
<td>83%</td>
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<tr>
<td>2017</td>
<td>43%</td>
<td>67%</td>
<td>100%</td>
</tr>
<tr>
<td>3-year avg.</td>
<td>64%</td>
<td>73.66%</td>
<td>78.66%</td>
</tr>
</tbody>
</table>

Pass rate is based on first-time attempt.

The positive placement rate, as defined by CAAHEP based on graduates of the paramedic program who are reporting working in either a full-time or part-time position as a paramedic within twelve months of graduation, continuing their education, or serving in the military.

**Plan of Study**

**Central and North Campus**

**5EMT**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMSP 1501</td>
<td>Emergency Medical Technician</td>
<td>5</td>
</tr>
<tr>
<td>EMSP 1160</td>
<td>Clinical-Emergency Medical Technician</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology (lecture &amp; lab)</td>
<td>4</td>
</tr>
</tbody>
</table>

| Credits |
|---------|---------|
| 10      |         |


Program Information

If you’ve always been fascinated by the human eye and have the desire to develop the knowledge base to perform skills under the supervision of licensed eye care professionals, then the San Jacinto College eye care technology program is for you.

Through our nationally recognized program, students learn a variety of skills including:

• Obtaining histories
• Performing diagnostic tests
• Understanding refractometry
• Recording functional ocular measurements and tests
• Administering topical ophthalmic and oral medications
• Instructing patients
• Maintaining equipment
• Sterilizing surgical instruments
• Assisting in ophthalmic surgery
• Fitting of contact lenses
• Practicing opticianry

The San Jacinto College eye care technology program is accredited by the Commission on Accreditation for Ophthalmic Medical Programs (CoA-OMP). The program requires formal entry via an interview with the program director. Only those students who have been officially admitted to the College and have met the eye care technology admission criteria will be considered. The department offers three graduation options. It is designed to connect the classroom and laboratory training with external clinical instruction at leading ophthalmic centers and practices.

Additional Information

All health care students are subject to criminal background and drug screening checks prior to entry.

The program begins fall term only. Students who miss the fall entry may discuss entry options with the program director. The San Jacinto College eye care technology program offers both day and evening classes.

The University of Houston Downtown currently accepts Associate of Applied Science (AAS) degrees into their Bachelor of Applied Arts and Sciences in Applied Administration (BAA-AA); please contact Diane Vo, 713-221-8522. For the Bachelor of Science (BS) degree in Applied Statistics with a Biostatistics concentration, please contact Ms. Tones, 713-221-8905.

Career Opportunities

Graduates of our eye care technology program have found employment in many areas of the eye care industry, including:

• Clinical Research Technician
• Contact Lens Technician
• Field Service Technician
• Ophthalmic Assistant
• Ophthalmic Surgical Assistant
• Ophthalmic Technician
• Optician

Note: Students must pass each course listed in the degree or certificate for Emergency Medical Technology with a grade of C or higher to be eligible to receive a degree or certificate.

Eye Care Technology, Associate of Applied Science

Students who believe they may pursue an Associate of Applied Science degree in Emergency Medical Technology (EMT) in the future should complete BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2101 Human Anatomy and Physiology I (Lab); and BIOL 2302 Human Anatomy and Physiology II (Lecture) and BIOL 2102 Human Anatomy and Physiology II (Lab).

Capstone Experience: EMSP 2268 Emergency Medical Technician Paramedic Practicum

1 Students must pass each course listed in the degree or certificate for Emergency Medical Technology with a grade of C or higher to be eligible to receive a degree or certificate.


- Optometric Assistant
- Retinal Photographer

**Earning Potential**

Certified Ophthalmic Technicians average salary: $51,733 per year

Certified Ophthalmic Assistant average salary: $42,500 per year

1 Source: Association of Technical Personnel in Ophthalmology

For more information, please contact 281-478-3606.

**Campus**

Central Campus

**Information**

A criminal background check and/or drug screening is required for all Health Science students attending clinical courses or practicum, and may be required prior to admission to the program.

Our eye care technology department consists of three levels of preparation. Students may obtain an Occupational Certificate, a Certificate of Technology, or their Associate of Applied Science degree. This program is designed to correlate classroom and laboratory experience with clinical experience in ophthalmic offices and clinics.

The eye care technology program is accredited by the International Council on Accreditation, formally the Commission on Accreditation of Ophthalmic Medical Programs (CoA-OMP). Those graduates of the Associate of Applied Science degree are eligible to petition for examination through the Joint Commission on Allied Health Personnel in Ophthalmology at the certified ophthalmic technician level. Graduates of any of the three levels are eligible to petition for examination through the American Board of Opticianry for certification as an optician and/or the National Contact Lens Examiner.

The program requires formal entry into the program via departmental interview. Only those students who have been officially admitted to the college and have met all college admission criteria will be considered. The eye care technology department accepts new students each fall term. Students who miss the fall entry may discuss spring or summer alternate entry options with the program director. The program offers both day and evening course as well as hybrid and online courses.

After acceptance into the program, the student must have a physical examination by a licensed professional and documentation of updated immunizations. A valid Healthcare Provider CPR card must be submitted as well. Eye care technology student must earn a C or better in all eye care courses and maintain an overall cumulative GPA of at least 2.0 in order to remain in and/or graduate from the program. Any student earning a grade of D, W, or F in any eye care technology course must repeat the course and pass with a grade of C or higher. A second earned grade of less than C will result in the student being dismissed from the program. To re-enter into the program the student must submit a written petition to the eye care technology admission committee, and satisfy the re-admission criteria specified by the committee.

**Plan of Study**

Central Campus

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTS 1311</td>
<td>Visual System</td>
<td>3</td>
</tr>
<tr>
<td>OPTS 2441</td>
<td>Ophthalmic Techniques</td>
<td>4</td>
</tr>
<tr>
<td>OPTS 1191</td>
<td>Special Topics in Opticianry/Dispensing Optician</td>
<td>1</td>
</tr>
<tr>
<td>HPRS 2200</td>
<td>Pharmacology for Health Professions</td>
<td>2</td>
</tr>
<tr>
<td>HPRS 1106</td>
<td>Essentials of Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td><strong>Second Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTS 1371</td>
<td>Anatomy and Physiology for Eye Care Technology</td>
<td>3</td>
</tr>
<tr>
<td>OPTS 1401</td>
<td>Ophthalmic Dispensing</td>
<td>4</td>
</tr>
<tr>
<td>OPTS 1315</td>
<td>Basic Contact Lenses</td>
<td>3</td>
</tr>
<tr>
<td>OPTS 1266</td>
<td>Practicum - Opticianry/Ophthalmic Dispensing Optician</td>
<td>2</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Summer Year One Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPRS 1105</td>
<td>Medical Law/Ethics for Health Professions</td>
<td>1</td>
</tr>
<tr>
<td>OPTS 2350</td>
<td>Ophthalmic Surgical Techniques</td>
<td>3</td>
</tr>
<tr>
<td>POFM 1327</td>
<td>Medical Insurance</td>
<td>3</td>
</tr>
<tr>
<td>OPTS 1166</td>
<td>Ophthalmic Practicum I</td>
<td>1</td>
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<tr>
<td><strong>Credits</strong></td>
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</tr>
<tr>
<td><strong>Third Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTS 2445</td>
<td>Advanced Ophthalmic Techniques</td>
<td>4</td>
</tr>
<tr>
<td>OPTS 1392</td>
<td>Special Topics in Opticianry/Dispensing Optician</td>
<td>3</td>
</tr>
<tr>
<td>OPTS 2266</td>
<td>Ophthalmic Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>Speech</td>
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<tr>
<td><strong>Credits</strong></td>
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<td>12</td>
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<tr>
<td><strong>Fourth Term</strong></td>
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<td></td>
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<tr>
<td>HPRS 2210</td>
<td>Basic Health Profession Skills II</td>
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<tr>
<td>OPTS 2366</td>
<td>Practicum - Opticianry/Ophthalmic Dispensing Optician</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<td>14</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<td>60</td>
</tr>
</tbody>
</table>

**Capstone Experience:** OPTS 2366 Practicum - Opticianry/Ophthalmic Dispensing Optician

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.
Eye Care Technology, Certificate of Technology

Program Information
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The San Jacinto College eye care technology program is accredited by the Commission on Accreditation for Ophthalmic Medical Programs (CoA-OMP). The program requires formal entry via an interview with the program director. Only those students who have been officially admitted to the College and have met the eye care technology admission criteria will be considered. The department offers three graduation options. It is designed to connect the classroom and laboratory training with external clinical instruction at leading ophthalmic centers and practices.

Additional Information
All health care students are subject to criminal background and drug screening checks prior to entry.

The program begins fall term only. Students who miss the fall entry may discuss entry options with the program director. The San Jacinto College eye care technology program offers both day and evening classes.

The University of Houston Downtown currently accepts Associate of Applied Science (AAS) degrees into their Bachelor of Applied Arts and Sciences in Applied Administration (BAA-AA); please contact Diane Vo, 713-221-8522. For the Bachelor of Science (BS) degree in Applied Statistics with a Biostatistics concentration, please contact Ms. Tones, 713-221-8905.

Career Opportunities
Graduates of our eye care technology program have found employment in many areas of the eye care industry, including:

- Clinical Research Technician
- Contact Lens Technician
- Field Service Technician
- Ophthalmic Assistant
- Ophthalmic Surgical Assistant
- Ophthalmic Technician
- Optician
- Optometric Assistant
- Retinal Photographer

Earning Potential
Certified Ophthalmic Technicians average salary: $51,733 per year
Certified Ophthalmic Assistant average salary: $42,500 per year

Source: Association of Technical Personnel in Ophthalmology

For more information, please contact 281-478-3606.

Campus
Central Campus

Information
A criminal background check and/or drug screening is required for all Health Science students attending clinical courses or practicum, and may be required prior to admission to the program.

Our eye care technology department consists of three levels of preparation. Students may obtain an Occupational Certificate, a Certificate of Technology, or their Associate of Applied Science degree. This program is designed to correlate classroom and laboratory experience with clinical experience in ophthalmic offices and clinics.

The eye care technology program is accredited by the International Council on Accreditation, formally the Commission on Accreditation of Ophthalmic Medical Programs (CoA-OMP). Those graduates of the Associate of Applied Science degree are eligible to petition for examination through the Joint Commission on Allied Health Personnel in Ophthalmology at the certified ophthalmic technician level. Graduates of any of the three levels are eligible to petition for examination through the American Board of Opticianry for certification as an optician and/or the National Contact Lens Examiner.

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After acceptance into the program, the student must have a physical examination by a licensed professional and documentation of updated
immunizations. A valid Healthcare Provider CPR card must be submitted as well.

Eye care technology student must earn a C or better in all eye care courses and maintain an overall cumulative GPA of at least 2.0 in order to remain in and/or graduate from the program. Any student earning a grade of D, W, or F in any eye care technology course must repeat the course and pass with a grade of C or higher. A second earned grade of less than C will result in the student being dismissed from the program. To re-enter into the program the student must submit a written petition to the eye care technology admission committee, and satisfy the re-admission criteria specified by the committee.

Plan of Study

Central Campus
4EYE

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<thead>
<tr>
<th>Course</th>
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Capstone Experience: OPTS 2266 Ophthalmic Practicum II

Eye Care, Optician Preparatory, Occupational Certificate

Program Information

If you've always been fascinated by the human eye and have the desire to develop the knowledge base to perform skills under the supervision of licensed eye care professionals, then the San Jacinto College eye care technology program is for you.

Through our nationally recognized program, students learn a variety of skills including:

- Obtaining histories
- Performing diagnostic tests
- Understanding refractometry
- Recording functional ocular measurements and tests
- Administering topical ophthalmic and oral medications
- Instructing patients
- Maintaining equipment
- Sterilizing surgical instruments
- Assisting in ophthalmic surgery
- Fitting of contact lenses
- Practicing opticianry

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- Retinal Photographer
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1 Source: Association of Technical Personnel in Ophthalmology

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Central Campus

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Plan of Study

Central Campus
6EYE-PREP

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Capstone Experience: OPTS 2167 Practicum Opticianry/Ophthalmic Dispensing Optician

Health Information Management, Associate of Applied Science

Program Information

If you possess stellar organizational, technological, and people skills and are interested in a career in health care, then San Jacinto College’s health information management program is the career path for you. Our program trains students to perform a wide variety of technical health information functions, including security, analysis, integration, and management of health information. The health information management program is designed to train students in a career that combines patient care management and technology.

The Associate of Applied Science (AAS) in Health Information Management at San Jacinto College is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Graduates of our AAS degree program are eligible to apply for the American Health Information Management Association (AHIMA) national certification exam to become a Registered Health Information Technician (RHIT). Graduates of our certificate of technology in medical coding program may apply for AHIMA’s national certification exam to become a Certified Coding Associate (CCA).
Career Opportunities

A career in health information management combines patient care management and technology in various professional work settings including:

- Hospitals and clinics
- Law firms
- Health maintenance organizations
- Insurance companies
- Nursing homes
- Health data organizations and health information vendors

Earning Potential

Health Information Management Manager (RHIT) average salary: $63,613

Health Information Management Technician (RHIT) average salary: $48,109

Medical Biller average salary: $37,495

Medical Coder average salary: $52,677

1 Source: www.hicareers.com (http://www.hicareers.com), 2015

For more information, please contact 281-998-6150, x7237.

Campus

North Campus

Information

The associate degree program is designed to train health information management personnel to perform a variety of technical functions including organizing, analyzing, coding, and technically evaluating health information. Health information technicians work to ensure that complete and accurate records are kept for each patient in a health care facility. The program is accredited by the Commission on Accreditation for Health Information and Information Management (CAHIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association. Students are eligible to apply to write the national exam for the RHIT after completion of the A.A.S. degree.

Plan of Study

North Campus

3HITT-INF

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<td>HITT 1301</td>
<td>Health Data Content and Structure</td>
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<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology</td>
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<td>(lecture &amp; lab)</td>
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Summer Year One Term

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Third Term

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<td>HITT 2335</td>
<td>Coding and Reimbursement Methodologies</td>
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<td>HITT 2343</td>
<td>Quality Assessment and Performance</td>
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Fourth Term

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External Learning Experience: HITT 2361 Clinical-Health Information/Medical Records Technology/Technician

Certification Exam: Registered Health Information Technician (RHIT)

National Certification Exam

1 Students must be Texas Success Initiative (TSI) complete in order to graduate: Math level 8.

2 Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, which is published in the San Jacinto Community College web catalog.

Note: Students must pass each HITT course listed in the health information management A.A.S. degrees, and certificate of technology plans with a grade of C to be eligible to receive either the degree or any of the certificates.
Health Information Mgmt, Cancer Data Management Specialty, Associate of Applied Science

Join the Fight against Cancer
Each year, researchers and medical practitioners make astounding strides in cancer research and treatment all around the world. You can become a key player in this exciting process by studying Cancer Data Management at San Jacinto College. Cancer breakthroughs are made primarily by a global accumulation of data that doctors and researchers use to develop and fine-tune treatments. Hospitals, cancer organizations, and state and national governments maintain cancer registries to collect this data, and they need help from dedicated specialists.

Accredited By
The Associate of Applied Science (AAS) degree in Cancer Data Management, and the Advanced Certificate of Technology in Cancer Data Management of San Jacinto College are fully accredited by the National Cancer Registrars Association (NCRA). Upon graduation, students are eligible to apply to take NCRA’s national exam to become a Certified Tumor Registrar (CTR).

Program Information
It takes much more than doctors to treat and cure cancer. If you desire to take a stand against this disease, our cancer data management program is designed to teach aspiring health science students all aspects of the cancer registry. Our well-rounded curriculum offers courses in survey processes, data collection/retrieval-abstracting, coding, staging, reporting, and how the cancer registry is a vital part of the health care delivery system. Join the fight against cancer at San Jacinto College now.

The Cancer Registrar is accountable to maintain the hospital-based registry of cancer patients including identification, abstracting, reporting, follow-up, and statistical compilation in order to participate in local, state and national registration programs. The Cancer Registrar also assists in the maintenance of a hospital-wide cancer program in compliance with regulatory requirements.

Program Requirements
San Jacinto College offers a two-year degree program and an advanced technical certificate option. To be eligible to complete the advanced technical certificate, the student must have at least a minimum of an associate degree and a medical science, basic science, or biology/introduction to medicine course.

Career Opportunities
Upon completing our program, students may pursue careers in cancer registry management in a hospital setting, free-standing state or national cancer registry, or in any of the state or national cancer organizations.

Earning Potential
Enter our associate degree program and you will learn all aspects of survey processes, data collection, abstracting, coding, staging, and reporting. The average salary for a certified tumor registrar is $50,599 per year.¹


For more information, please contact (281) 998-6150 x7237.

Campus
North Campus

Plan of Study
North Campus
3HITT-CAN

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<td>HITT 1305</td>
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<td>HITT 2343</td>
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Fourth Term

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External Learning Experience: HITT 1361 Clinical-Cancer Data Management

Certification Exam: CTR National Certification Exam

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The Associate of Applied Science (AAS) degree in Cancer Data Management, and the Advanced Certificate of Technology in Cancer Data Management of San Jacinto College are fully accredited by the National Cancer Registrars Association (NCRA). Upon graduation, students are eligible to apply to take NCRA’s national exam to become a Certified Tumor Registrar (CTR).

Program Information

It takes much more than doctors to treat and cure cancer. If you desire to take a stand against this disease, our cancer data management program is designed to teach aspiring health science students all aspects of the cancer registry. Our well-rounded curriculum offers courses in survey processes, data collection/retrieval-abstracting, coding, staging, reporting, and how the cancer registry is a vital part of the health care delivery system. Join the fight against cancer at San Jacinto College now.

The Cancer Registrar is accountable to maintain the hospital-based registry of cancer patients including identification, abstracting, reporting, follow-up, and statistical compilation in order to participate in local, state and national registration programs. The Cancer Registrar also assists in the maintenance of a hospital-wide cancer program in compliance with regulatory requirements.

Program Requirements

San Jacinto College offers a two-year degree program and an advanced technical certificate option. To be eligible to complete the advanced technical certificate, the student must have at least a minimum of an associate degree and a medical science, basic science, or biology/introduction to medicine course.

Career Opportunities

Upon completing our program, students may pursue careers in cancer registry management in a hospital setting, free-standing state or national cancer registry, or in any of the state or national cancer organizations.

Earning Potential

Enter our associate degree program and you will learn all aspects of survey processes, data collection, abstracting, coding, staging, and reporting. The average salary for a certified tumor registrar is $50,599 per year.  


For more information, please contact (281) 998-6150 x7237.

Campus

North Campus

This Advanced Technical Certificate is designed to teach all aspects of the cancer registry, including survey processes, data collection/retrieval-abstracting, coding, staging and reporting; and how the cancer registry is a vital part of the health care delivery system. Upon completion of this program, the student is eligible to write for the national certification examination for Certified Tumor Registrar (CTR) from the National Cancer Registrars Association.

Plan of Study

North Campus

AHITT-CAN
Prerequisites
To be eligible to complete this Advanced Technical Certificate, the student must have at least a minimum of an associate degree and a medical science/basic science or Biology/Introduction to Medicine course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Term</td>
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</tr>
<tr>
<td>HIT 1305</td>
<td>Medical Terminology I</td>
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<tr>
<td>HIT 2371</td>
<td>Pathophysiology and Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology (lecture &amp; lab)</td>
<td>4</td>
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<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
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<tr>
<td>HIT 1311</td>
<td>Health Information Systems</td>
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<td>HIT 2307</td>
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<td>HIT 2370</td>
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<td>HIT 1361</td>
<td>Clinical-Cancer Data Management</td>
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External Learning Experience: HIT 1361 Clinical-Cancer Data Management
Certification Exam: CTR National Certification Exam

Note: Students must pass each HITT course listed in the health information management A.A.S. degrees, and certificate plans with a grade of C to be eligible to receive either the degree or any of the certificates.

Health Information Mgmt, Medical Billing, Certificate of Technology

Program Information
If you possess stellar organizational, technological, and people skills and are interested in a career in health care, then San Jacinto College's health information management program is the career path for you. Our program trains students to perform a wide variety of technical health information functions, including security, analysis, integration, and management of health information. The health information management program is designed to train students in a career that combines patient care management and technology.

The Associate of Applied Science (AAS) in Health Information Management at San Jacinto College is fully accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Graduates of our AAS degree program are eligible to apply for the American Health Information Management Association (AHIMA) national certification exam to become a Registered Health Information Technician (RHIT). Graduates of our certificate of technology in medical coding program may apply for AHIMA’s national certification exam to become a Certified Coding Associate (CCA).

Career Opportunities
A career in health information management combines patient care management and technology in various professional work settings including:

- Hospitals and clinics
- Law firms
- Health maintenance organizations
- Insurance companies
- Nursing homes
- Health data organizations and health information vendors

Earning Potential
Health Information Management Manager (RHIT) average salary: $63,613
Health Information Management Technician (RHIT) average salary: $48,109
Medical Biller average salary: $37,495
Medical Coder average salary: $52,677

1 Source: www.hicareers.com (http://www.hicareers.com), 2015

For more information, please contact 281-998-6150, x7237.

Campus
North Campus

Plan of Study
North Campus
4HITT-MDBC

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>HIT 1305</td>
<td>Medical Terminology I</td>
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<td>HIT 1374</td>
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</tr>
<tr>
<td>HIT 1341</td>
<td>Coding and Classification Systems</td>
<td>3</td>
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</tbody>
</table>
Program Information

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• Hospitals and clinics
• Law firms
• Health maintenance organizations
• Insurance companies
• Nursing homes
• Health data organizations and health information vendors

Earning Potential

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Health Information Management Technician (RHIT) average salary: $48,109

Medical Biller average salary: $37,495

Medical Coder average salary: $52,677

1 Source: www.hicareers.com (http://www.hicareers.com), 2015

For more information, please contact 281-998-6150, x7237.

Campus

North Campus

Plan of Study

North Campus

5HITT-MDC

<table>
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<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology (lecture &amp; lab)</td>
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<td>ITSC 1309</td>
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<td>Second Term</td>
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<tr>
<td>HITT 1345</td>
<td>Health Care Delivery Systems</td>
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<tr>
<td>HITT 2371</td>
<td>Pathophysiology and Pharmacology</td>
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<td>Coding and Classification Systems</td>
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<td>HITT 1342</td>
<td>Ambulatory Coding</td>
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<td>HITT 1311</td>
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<td>HITT 1353</td>
<td>Legal and Ethical Aspects of Health Information</td>
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<td>HITT 2245</td>
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<td>HITT 2335</td>
<td>Coding and Reimbursement Methodologies</td>
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<td>HITT 1360</td>
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External Learning Experience: HITT 1360 Clinical-Health Information/Medical Records Technology/Technician
Note: Students must pass each HITT course listed in the health information management A.A.S. degrees, and certificate plans with a grade of C to be eligible to receive either the degree or any of the certificates.

Health Science Medical Assisting Pathway, Associate of Applied Science

Program Information
The Associate of Applied Science (AAS) in Health Science Concentration is a career path for persons who have completed one of the following certificate programs: medical assisting, pharmacy technician, or vocational nursing.

The 60-credit hour degree is designed for health science professionals in these areas to meet continuing education goals, transfer into four-year university healthcare administration or allied health programs, and to attain possible promotion from entry-level to advanced-level clinical positions.

Career Outlook Vocational Nursing
The US Department of Labor is reporting a sharp increase for these jobs, with specific increases in large cities and metropolitan areas.

Graduates can work in:

- Hospitals;
- Out-patient facilities; and
- Nursing homes.

Median salary for Gulf Coast region $48,783 per year, Licensed Practical and Licensed Vocational Nurses

Career Outlook Medical Assisting
A medical assisting certificate of technology prepares students for careers in the offices of:

- Physicians
- Podiatrists
- Chiropractors
- Ophthalmologists
- Other health practitioners

Median salary for Gulf Coast region $31,374 per year, Medical Assistant

Career Outlook Pharmacy Technician
Employment of pharmacy technicians is expected to increase by 20 percent from 2010 - 2020, which is much faster than the average for all occupations. This demand will be due to the expansion of retail pharmacies, the increased number of middle-aged and elderly people, and the increasing roles and responsibilities of pharmacy technicians.

Graduates of our program are able to work as pharmacy technicians in:

- Hospitals
- Nursing homes
- Retail
- Home health care
- Public and government health agencies

Median salary for Gulf Coast region $34,873 per year, Pharmacy Technician

For more information, please contact Central Campus, 281-476-1817; North Campus, 281-459-7618; and South Campus, 281-922-3466.

Campuses
Central Campus
North Campus
South Campus

Information
The Associate of Applied Science (A.A.S.) in Health Science is a career path for persons who have completed the following certificate programs: Medical Assisting, Pharmacy Technician, or Vocational Nursing. The 60 semester credit hour degrees for these programs are designed for health science professionals to meet education goals, transfer into four-year university healthcare administration or healthcare service programs, and to attain possible promotion from entry-level to more advanced level office positions.

Plan of Study

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>MDCA 1313</td>
<td>Medical Terminology</td>
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<td>POFT 1301</td>
<td>Business English</td>
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<td>MDCA 1309</td>
<td>Anatomy and Physiology for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td>MDCA 1421</td>
<td>Administrative Procedures</td>
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<tr>
<td>MDCA 1343</td>
<td>Medical Insurance</td>
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<td>Credits</td>
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<td>Second Term</td>
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<tr>
<td>MDCA 1205</td>
<td>Medical Law and Ethics</td>
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<tr>
<td>MDCA 1302</td>
<td>Human Disease/Pathophysiology</td>
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</tbody>
</table>

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
MDCA 1448 Pharmacology and Administration of Medications 4
MDCA 1310 Medical Assistant Interpersonal and Communication Skills 3
MDCA 1417 Procedures in a Clinical Setting 4
Credits 16

Summer Year One Term
MDCA 1254 Medical Assisting Credentialing Exam Review 2
MDCA 1560 Clinical - Medical/Clinical Assistant 5
Credits 7

Third Term
ENGL 1301 Composition I 3
MATH 1314 College Algebra 3
BCIS 1305 Business Computer Applications 3
Select one of the following: 3
SPCH 1311 Introduction to Speech Communication
SPCH 1315 Public Speaking
SPCH 1318 Interpersonal Communications
SPCH 1321 Business and Professional Speech
Credits 12

Fourth Term
ENGL 1302 Composition II 3
PSYC 2301 General Psychology 3
Language, Philosophy, and Culture or Creative Arts 1 3
Credits 9
Total Credits 60

To be eligible for this degree, the student must have completed the Medical Assisting certificate program.

1 Courses which satisfy the Humanities or Fine Arts requirement are listed in this section of the Transfer Core Curriculum, which is published in the San Jacinto Community College catalog.

Health Science Pharmacy Technician Pathway, Associate of Applied Science

Program Information
The Associate of Applied Science (AAS) in a Health Science Concentration is a career path for persons who have completed one of the following certificate programs: medical assisting, pharmacy technician, or vocational nursing.

The 60-credit hour degree is designed for health science professionals in these areas to meet continuing education goals, transfer into four-year university health care administration or allied health programs, and to attain possible promotion from entry-level to advanced-level clinical positions.

Career Outlook Vocational Nursing
The US Department of Labor is reporting a sharp increase for these jobs, with specific increases in large cities and metropolitan areas.

Graduates can work in:
- Hospitals;
- Out-patient facilities; and
- Nursing homes.

Median salary for Gulf Coast region $48,783 per year, Licensed Practical and Licensed Vocational Nurses 1

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Career Outlook Medical Assisting
A medical assisting certificate of technology prepares students for careers in the offices of:
- Physicians
- Podiatrists
- Chiropractors
- Ophthalmologists
- Other health practitioners

Median salary for Gulf Coast region $31,374 per year, Medical Assistant 1

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Career Outlook Pharmacy Technician
Employment of pharmacy technicians is expected to increase by 20 percent from 2010 - 2020, which is much faster than the average for all occupations. This demand will be due to the expansion of retail pharmacies, the increased number of middle-aged and elderly people, and the increasing roles and responsibilities of pharmacy technicians.

Graduates of our program are able to work as pharmacy technicians in:
- Hospitals
- Nursing homes
- Retail
- Home health care
- Public and government health agencies

Median salary for Gulf Coast region $34,873 per year, Pharmacy Technician 1

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
For more information, please contact Central Campus, 281-476-1817; North Campus, 281-459-7618; and South Campus, 281-922-3466.

Campuses
Central Campus
North Campus
South Campus

Information
The Associate of Applied Science (A.A.S.) in a Health Science is a career path for persons who have completed the following certificate programs: Medical Assisting, Pharmacy Technician, or Vocational Nursing. The 60 semester credit hour degrees for these programs are designed for health science professionals to meet education goals, to transfer into four-year university healthcare administration or healthcare service programs, and to attain possible promotion from entry-level to more advanced level office positions.

Plan of Study
All Campuses
3HSC-PHAR

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<td>HPRS 1206</td>
<td>Essentials of Medical Terminology</td>
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<td>PHRA 1202</td>
<td>Pharmacy Law</td>
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<td>PHRA 1305</td>
<td>Drug Classification</td>
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<td>PHRA 1309</td>
<td>Pharmaceutical Mathematics I</td>
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<td>PHRA 1313</td>
<td>Community Pharmacy Practice I</td>
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<td>PHRA 1441</td>
<td>Pharmacy Drug Therapy and Treatment</td>
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<td>PHRA 1347</td>
<td>Pharmaceutical Mathematics II</td>
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<td>PHRA 1345</td>
<td>Compounding Sterile Preparations and Aseptic Technique</td>
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<td>PHRA 1349</td>
<td>Institutional Pharmacy Practice</td>
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<td>PHRA 1243</td>
<td>Pharmacy Technician Certification Review</td>
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<td>PHRA 1261</td>
<td>Clinical-Pharmacy Technician I</td>
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<td>PHRA 2261</td>
<td>Clinical-Pharmacy Technician II</td>
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<td><strong>Fourth Term</strong></td>
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<td>MATH 1314</td>
<td>College Algebra</td>
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<td>PSYC 2301</td>
<td>General Psychology</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts ¹</td>
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<td>Select one of the following:</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>SPCH 1315</td>
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<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
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<td>Business and Professional Speech</td>
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<td><strong>Credits</strong></td>
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<td><strong>Fifth Term</strong></td>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<td>BIOL 1306</td>
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<td>&amp; BIOL 1106</td>
<td>and Biology for Science Majors I (lab)</td>
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<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<td>HIST 1301</td>
<td>United States History I</td>
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To be eligible for this degree, the student must have completed the Pharmacy Technician certificate program.

¹ Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.

Health Science Vocational Nursing Pathway, Associate of Applied Science

Program Information
The Associate of Applied Science (AAS) in a Health Science Concentration is a career path for persons who have completed one of the following certificate programs: medical assisting, pharmacy technician, or vocational nursing.

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Career Outlook Vocational Nursing
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Graduates can work in:
- Hospitals;
- Out-patient facilities; and
- Nursing homes.
Median salary for Gulf Coast region $48,783 per year, Licensed Practical and Licensed Vocational Nurses

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

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- Chiropractors
- Ophthalmologists
- Other health practitioners

Median salary for Gulf Coast region $31,374 per year, Medical Assistant

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Career Outlook Pharmacy Technician
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- Hospitals
- Nursing homes
- Retail
- Home health care
- Public and government health agencies

Median salary for Gulf Coast region $34,873 per year, Pharmacy Technician

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1817; North Campus, 281-459-7618; and South Campus, 281-922-3466.

Campuses
Central Campus
North Campus
South Campus

Information
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Plan of Study
All Campuses
3HSC-LVN

Course | Title | Credits
--- | --- | ---
First Term | Select one of the following: | 4
VNSG 1420 | Anatomy and Physiology for Allied Health | 4
Biol 2301 | Human Anatomy and Physiology I (Lecture) | 2
& Biol 2101 | and Human Anatomy and Physiology I (Lab) | 2
Biol 2302 | Human Anatomy and Physiology II (Lecture) | 2
& Biol 2102 | and Human Anatomy and Physiology II (Lab) | 2
VNSG 1327 | Essentials of Medication Administration | 3
VNSG 1423 | Basic Nursing Skills | 4
VNSG 2431 | Advanced Nursing Skills | 4
VNSG 1260 | Clinical I | 2

Credits | 17

Second Term | Medical - Surgical Nursing I | 4
VNSG 1331 | Pharmacology | 3
HECO 1322 | Nutrition and Diet Therapy | 3
VNSG 1261 | Clinical II - Licensed Practical/Vocational Nursing Training | 2
VNSG 1301 | Mental Health and Mental Illness | 3
VNSG 1226 | Gerontology | 2
VNSG 1162 | Clinical III - Practical Nurse | 1

Credits | 18

Third Term | Medical-Surgical Nursing II | 3
VNSG 1230 | Maternal-Neonatal Nursing | 2
VNSG 1234 | Pediatrics | 2
VNSG 2160 | Clinical IV - Licensed Practical/Vocational Nursing Training | 1
VNSG 2161 | Clinical V - Licensed Practical/Vocational Nurse Training | 1
VNSG 1119 | Leadership and Professional Development | 1

Credits | 10

Fourth Term | College Algebra | 3
MATH 1314 | General Psychology | 3
PSYC 2301 | Composition I | 3
ENGL 1301 | Language, Philosophy, and Culture or Creative Arts | 3
Select one of the following: | 3
SPCH 1311 | Introduction to Speech Communication | 3
SPCH 1315 | Public Speaking | 3
SPCH 1318 | Interpersonal Communications | 3
SPCH 1321 | Business and Professional Speech | 3

Credits | 15
Total Credits | 60
To be eligible for this degree, the student must have completed the Vocational Nursing certificate program.

Courses which satisfy the Humanities or Fine Arts requirement are listed in this section of the Transfer Core Curriculum, which is published in the San Jacinto Community College catalog.

Kinesiology, Associate of Arts

Get Moving Toward Your Goals

Kinesiology is defined as “the science of human movement.” Colleges and universities that have majors in this area may call it physical education, health and human performance, exercise science, or sports medicine. Students will study concepts of health and fitness, personal and community health, first aid, and foundations of physical education and sports.

This is not just an area of study to prepare future teachers and coaches, there are also career opportunities in the sports industry for non-athletes. Some of these will require coursework in business, management, physiology, internships, marketing, and sports medicine.

Career Opportunities

Students pursuing an education in kinesiology may choose from a variety of career paths that include:

- Athletic trainers $61,633*
- Recreation workers $23,226*
- Coaches and scouts $37,985*

*Source: www.texaswages.com, 2017 annual median salaries for Gulf Coast region

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major. Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

All Campuses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHED 1301</td>
<td>Foundations of Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHED 1304</td>
<td>Personal/Community Health</td>
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</tr>
<tr>
<td>PHED 1306</td>
<td>First Aid</td>
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</tr>
<tr>
<td>PHED 1338</td>
<td>Concepts of Physical Fitness</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td>EDUC 1300</td>
<td>Learning Framework</td>
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<tr>
<td>PSYC 1300</td>
<td>Learning Framework</td>
<td>3</td>
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<tr>
<td>Academic elective (if successfully completed GUST 0305)</td>
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<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<tr>
<td>Academic elective (if student passes the computer literacy exam)</td>
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<td>ENGL 1301</td>
<td>Composition I (required)</td>
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<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
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<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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Mathematics

Select one of the following:

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<th>Title</th>
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<tr>
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<td>College Algebra</td>
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<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
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<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences 1</td>
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</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences 1</td>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods (Statistics) 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2318</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2320</td>
<td>Differential Equations</td>
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<tr>
<td>MATH 2412</td>
<td>Pre-Calculus Math</td>
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<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
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<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
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Life and Physical Sciences (Natural Science)

Select two of the following:

<table>
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<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>ASTR 1303</td>
<td>Stars and Galaxies (lecture)</td>
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<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
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<td>BIOL 1306</td>
<td>Biology for Science Majors I (lecture)</td>
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<td>BIOL 1307</td>
<td>Biology for Science Majors II (lecture)</td>
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<tr>
<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (lecture) 4</td>
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</tr>
<tr>
<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (lecture) 4</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>BIOL 1311</td>
<td>General Botany</td>
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<td>BIOL 1313</td>
<td>General Zoology (Lecture)</td>
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<tr>
<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<tr>
<td>CHEM 1305</td>
<td>Introductory Chemistry I (lecture)</td>
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<tr>
<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<tr>
<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
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<tr>
<td>GEOL 1301</td>
<td>Earth Sciences for Non-Science Majors I (lecture)</td>
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<td>GEOL 1303</td>
<td>Physical Geology (lecture)</td>
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<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
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<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
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<td>PHYS 1301</td>
<td>College Physics I (lecture)</td>
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<td>College Physics II (lecture)</td>
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<tr>
<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
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<tr>
<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
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**Language, Philosophy, and Culture (Humanities)**

Select one of the following: 3

<table>
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<tr>
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<tbody>
<tr>
<td>ENGL 2322</td>
<td>British Literature I</td>
</tr>
<tr>
<td>ENGL 2323</td>
<td>British Literature II</td>
</tr>
<tr>
<td>ENGL 2327</td>
<td>American Literature I</td>
</tr>
<tr>
<td>ENGL 2328</td>
<td>American Literature II</td>
</tr>
<tr>
<td>ENGL 2332</td>
<td>World Literature I</td>
</tr>
<tr>
<td>ENGL 2333</td>
<td>World Literature II</td>
</tr>
<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
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<tr>
<td>ENGL 2351</td>
<td>Mexican American Literature</td>
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<td>GEOG 1302</td>
<td>Human Geography</td>
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<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
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<tr>
<td>HIST 2322</td>
<td>World Civilization II</td>
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<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
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<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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**Creative Arts (Fine Arts)**

Select one of the following: 3

<table>
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<tr>
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<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
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<tr>
<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
</tr>
<tr>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
</tr>
<tr>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
</tr>
<tr>
<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation I</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>MUSI 1307</td>
<td>Music Literature</td>
</tr>
<tr>
<td>MUSI 1310</td>
<td>American Music</td>
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**American History**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 1301</td>
<td>United States History I</td>
</tr>
<tr>
<td>HIST 1302</td>
<td>United States History II</td>
</tr>
<tr>
<td>HIST 2301</td>
<td>Texas History</td>
</tr>
<tr>
<td>HIST 2327</td>
<td>Mexican American History I</td>
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<tr>
<td>HIST 2328</td>
<td>Mexican American History II</td>
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**Government/Political Science**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution and Topics)</td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government (Texas Constitution and Topics)</td>
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**Social and Behavioral Sciences**

Select one of the following: 3

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ANTH 2302</td>
<td>Introduction to Archaeology</td>
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<tr>
<td>ANTH 2346</td>
<td>General Anthropology</td>
</tr>
<tr>
<td>ANTH 2351</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>GEOG 1303</td>
<td>World Regional Geography</td>
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<tr>
<td>GOVT 2304</td>
<td>Introduction to Political Science</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HIST 2312</td>
<td>Western Civilization II</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
</tr>
<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOCI 2319</td>
<td>Minority Studies I</td>
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</table>

**Component Area Option**

Select two of the following: 6

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<th>Course Code</th>
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<tbody>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
</tr>
<tr>
<td>PHED 1164</td>
<td>Introduction to Physical Fitness and Wellness</td>
</tr>
<tr>
<td>CHIN 1411</td>
<td>Beginning Chinese I</td>
</tr>
<tr>
<td>CHIN 1412</td>
<td>Beginning Chinese II</td>
</tr>
<tr>
<td>FREN 1411</td>
<td>Beginning French I</td>
</tr>
<tr>
<td>FREN 1412</td>
<td>Beginning French II</td>
</tr>
<tr>
<td>GERM 1411</td>
<td>Beginning German I</td>
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<tr>
<td>GERM 1412</td>
<td>Beginning German II</td>
</tr>
<tr>
<td>SGNL 1401</td>
<td>Beginning American Sign Language I</td>
</tr>
<tr>
<td>SGNL 1402</td>
<td>Beginning American Sign Language II</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish I</td>
</tr>
<tr>
<td>SPAN 1412</td>
<td>Beginning Spanish II</td>
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</tbody>
</table>

**Total Credits**: 48

1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.
2. Students must be simultaneously co-enrolled in the co-requisite science lab.
3. MATH 1342 is required for a bachelor's degree in nursing.
4. BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.
5. BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.
6. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.
2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College’s 42-hour core curriculum, that block of courses must be substituted for the receiving institution’s core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

Medical Assisting, Certificate of Technology

Program Information

The medical field is one of the fastest growing industries in the nation. As more doctors open new offices or join established practices, the need for well-trained assistants increases. Medical assistants are trusted with huge responsibilities, both administrative and clinical. A day’s work may have you scheduling appointments, preparing patients for examination, recording vital signs, arranging hospital admissions, handling laboratory specimens, sterilizing instruments, calling in prescriptions, drawing blood, handling insurance, removing sutures and taking electrocardiograms.

Employment of medical assistants is expected to grow much faster than the average for all occupations as the health services industry expands. Employment growth will be driven by the increase in the number of group practices, clinics and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties.

Upon completion of the medical assisting program, the student is granted a certificate of technology and is eligible to sit for two exams. These include the AAMA Certification Examination to earn the Certified Medical Assistant, CMA (AAMA) certification and the Registered Medical Assistant Exam to earn the RMA (AMT) certification.

The San Jacinto College medical assisting program is accredited by:

The Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North

San Jacinto College 2018-2019
Plan of Study

North Campus
4MED-ASST

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>MDCA 1313</td>
<td>Medical Terminology</td>
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<td>POFT 1301</td>
<td>Business English</td>
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<tr>
<td>MDCA 1309</td>
<td>Anatomy and Physiology for Medical Assistants</td>
<td>3</td>
</tr>
<tr>
<td>MDCA 1421</td>
<td>Administrative Procedures</td>
<td>4</td>
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<tr>
<td>MDCA 1343</td>
<td>Medical Insurance</td>
<td>3</td>
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<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Second Term</strong></td>
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<tr>
<td>MDCA 1205</td>
<td>Medical Law and Ethics</td>
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<tr>
<td>MDCA 1302</td>
<td>Human Disease/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>MDCA 1448</td>
<td>Pharmacology and Administration of Medications</td>
<td>4</td>
</tr>
<tr>
<td>MDCA 1310</td>
<td>Medical Assistant Interpersonal and Communication Skills</td>
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</tr>
<tr>
<td>MDCA 1417</td>
<td>Procedures in a Clinical Setting</td>
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<td><strong>Credits</strong></td>
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<td><strong>Summer Year One Term</strong></td>
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<tr>
<td>MDCA 1254</td>
<td>Medical Assisting Credentialing Exam Review</td>
<td>2</td>
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<tr>
<td>MDCA 1560</td>
<td>Clinical - Medical/Clinical Assistant</td>
<td>5</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

External Experience: MDCA 1560 Clinical - Medical/Clinical Assistant

Note: Students must pass each course listed in the certificate for Medical Assistant with a grade of C or higher to be eligible to receive a certificate of technology.

Program Information
Are you fascinated by technology and the inner workings of the human body? If so, a career in computed tomography, mammography or magnetic resonance imaging may be the right path for you. These imaging professionals are qualified to provide patient imaging using technology and equipment for CT, mammography and MRI under the supervision of a medical doctor to examine various anatomic structures in the body.

The advanced imaging modalities program at San Jacinto College:
- Prepares the A.R.R.T. registered students to work in advanced modality positions in hospitals and other health care facilities through a variety of clinical rotations.
- Educates students to produce images used for assessment and diagnosis of various medical conditions.
- Encourages students through a variety of methods to be clinically competent, possess critical thinking skills, communicate effectively, both written and orally, and exhibit ethical and professional behavior.

Career Opportunities
Employment outlook is excellent and many of our students gain employment in the field prior to completion of this certificate program.

Graduates of this program are employed in hospitals, clinics and imaging centers.

Earning Potential
Radiologic Technologist median salary: $61,892 per year¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-476-1871 or cassandra.gossett@sjcd.edu.
Information
Medical imaging technology consists of three associate of applied science degrees and four certificate programs. The degree programs are medical radiography, diagnostic medical sonography, and invasive cardiovascular technology. The advanced or enhanced certificate programs are computed tomography, invasive cardiovascular technology, magnetic resonance imaging, and mammography. Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate- Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Enhanced Skills Certificate
The computed tomography (CT) program includes advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. While enrolled in the CT Program practical experience is simultaneously related to theory.

Minimum Program Admission Criteria
Applicants must be American Registry of Radiologic Technologists (ARRT) registered in either radiography or nuclear medicine and hold a Texas Medical Board Medical Radiologic Technologist License. The student must complete and submit an application to the medical imaging department. The applicant must also submit required health records, proof of health insurance, CPR certification (American Heart Associate- Health Care Provider), criminal background check and drug screen as stated for all medical imaging students – see section directly under medical imaging technology and Central Campus for an explanation of requirements. Acceptance into the computed tomography program is determined after review of the application and completion of requirements. Prospective participants should call the medical imaging department at 281-476-1871 for additional information.

Plan of Study
Central Campus
EMRAD-CT

Please see Medical Radiography, Associate of Applied Science (p. 188) page for more information.
• Typical school calendar is followed (16-week spring and fall terms; 13-week summer term)
• Tuition, fees, and books are approximately $2,960/year for in-district students. The first semester is approximately $500 extra for immunizations, uniforms, CPR certification and online clinical system.

Career Opportunities
Employment of sonographers is expected to grow by 44 percent by 2020, much faster than the average for all occupations. Sonographic technology is expected to evolve rapidly and to spawn many new sonography procedures, such as 3D- and 4D-sonography for use in obstetric and ophthalmologic diagnosis.

Earning Potential
Diagnostic Medical Sonographer average median salary: $74,044 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-476-1871 or michele.noel@sjcd.edu.

Campus
Central Campus

Links
• Sonography Checklist - Fall
• Program Description
• JRC-DMS Program Outcomes

Information
Medical imaging technology consists of three associate of applied science degrees and four certificate programs. The degree programs are medical radiography, diagnostic medical sonography, and invasive cardiovascular technology. The advanced or enhanced certificate programs are computed tomography, invasive cardiovascular technology, magnetic resonance imaging, and mammography. Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate- Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Associate of Applied Science Degree
A Medical Sonographer is a person qualified to provide patient imaging using ultrasound under the supervision of a medical doctor. The Diagnostic Medical Sonography Program prepares students to work in entry-level positions in hospitals and other health care facilities. Upon completion of the Diagnostic Medical Program the student is granted an associate of applied science degree and is eligible to apply to take exams for the American Registry of Diagnostic medical Sonographers (ARDMS) and/or the American Registry of Radiologic Technologists (ARRT).

Diagnostic Medical Sonography Program Goals
1. Graduates will be clinically competent sonographers.
2. Graduates will be eligible to apply for, take and pass the American Registry of Diagnostic Medical Sonography certification exams upon completion of the program.
3. Graduates will be able to find employment.
4. Graduates will be satisfied with their education.
5. Employers will be satisfied with program graduates.

Admission Criteria
Students are admitted annually into the Diagnostic Medical Sonography Program. Because clinical space is limited, students are admitted on a competitive basis. In addition to the general admission requirements of San Jacinto College, all prerequisite courses must be completed prior to acceptance into the Diagnostic Medical Sonography Program. Preference will be given to applicants who meet one of the following when applying to the program:

• Graduate of a two (2) year patient-related allied healthcare program (radiography, respiratory, paramedic, nursing, occupational therapy or surgical technology);
• Bachelor’s degree (any major);
• Licensed Vocational Nurse (LVN) graduate;
• Certified Nurse Aide (CNA) + 2 years work experience; or
• 3+ years direct patient care work experience.

Computer proficiency is recommended for the Sonography Program. Students who do not have computer proficiency are encouraged to take BCIS 1305 Business Computer Applications or ITSC 1309 Integrated Software Applications I. Students meeting the above criteria will be awarded points for these sections on the Sonography Applicant Ranking Worksheet.

The applicant must submit a current resume’, official transcripts, and two letters of recommendation. The applicant must complete and submit an application to the Medical Imaging Department. Applicants must attend a mandatory information meeting as posted on the San Jacinto College Website or by calling 281-476-1871 for dates. The applicant must also submit required health records, proof of health insurance, CPR (American Heart Associate- Health Care Provider), criminal background check, and drug screen as stated for all Medical Imaging students — see section directly under Medical Imaging Technology and Central Campus for an explanation of requirements. Acceptance into the Sonography Program is determined after review of the application and completion of all requirements.

Prospective applicants should call the Medical Imaging Department at 281-476-1871 for additional information.

Plan of Study
Central Campus
3MED-SONO
### Medical Imaging, Invasive Cardiovascular Technology, Advanced Technical Certificate

#### Course Prerequisites
- **Course**: PSYC 2301 General Psychology **Credits**: 3
- **Language, Philosophy, and Culture or Creative Arts** 1 **Credits**: 3
- **Course**: ENGL 1301 Composition I **Credits**: 3
- **Course**: BIOL 2404 or BIOL 2301 and BIOL 2101 Introduction to Anatomy and Physiology (lecture & lab) or Human Anatomy and Physiology I (Lecture) and Human Anatomy and Physiology I (Lab) **Credits**: 4
- **Course**: MATH 1314 College Algebra **Credits**: 3
- **Course**: RADR 2209 or PHYS 1301 and PHYS 1101 Radiographic Imaging Equipment or College Physics I (lecture) and College Physics I (lab) **Credits**: 2
- **Course**: SPCH 1315 or SPCH 1318 Public Speaking or Interpersonal Communications **Credits**: 3

### First Term
- **Course**: RADR 1203 Patient Care **Credits**: 2
- **Course**: DMSO 1110 Introduction to Sonography **Credits**: 1

### Second Term
- **Course**: DMSO 1166 Practicum I - Diagnostic Medical Sonography **Credits**: 1
- **Course**: DMSO 1302 Basic Ultrasound Physics **Credits**: 3
- **Course**: DMSO 1441 Abdominopelvic Sonography **Credits**: 4
- **Course**: DMSO 1251 Sonographic Sectional Anatomy **Credits**: 2

### Third Term
- **Course**: DMSO 1266 Practicum II - Diagnostic Medical Sonography **Credits**: 2
- **Course**: DMSO 2405 Sonography of Obstetrics/Gynecology **Credits**: 4
- **Course**: DMSO 2253 Sonography of Superficial Structures **Credits**: 2
- **Course**: DMSO 1355 Sonographic Pathophysiology **Credits**: 3
- **Course**: DMSO 1342 Intermediate Ultrasound Physics **Credits**: 3

### Fourth Term
- **Course**: DMSO 1267 Practicum III - Diagnostic Medical Sonography **Credits**: 2
- **Course**: DMSO 2245 Advanced Sonography Practices **Credits**: 2
- **Course**: DMSO 2342 Sonography of High Risk Obstetrics **Credits**: 3
- **Course**: DMSO 2343 Advanced Ultrasound Physics **Credits**: 3

### Fifth Term
- **Course**: DMSO 2230 Advanced Ultrasound and Review **Credits**: 2
- **Course**: DMSO 1367 Practicum IV - Diagnostic Medical Sonography **Credits**: 3

### Capstone Experience: DMSO 1367 Practicum IV - Diagnostic Medical Sonography **Credits**: 5

Total Credits: 63

---

1. Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, which is published in the San Jacinto Community College web catalog.
Admission Criteria

A limited number of students are admitted into the program annually. Class size is determined by the availability of clinical space. All applicants must have completed the prerequisite courses prior to admission to the program. The applicant must submit official transcripts, and two letters of recommendation (one from an instructor or clinical personnel). The applicant must complete and submit an application to the Medical Imaging Department for the Invasive Cardiovascular Technology Program. Applicants must attend a mandatory information meeting (dates available on website). The applicant must also submit required health records, CPR (American Heart Associate- Health Care Provider), criminal background check, and drug screen as stated for all Medical Imaging students - see section directly under Medical Imaging Technology and Central Campus for an explanation of requirements. Acceptance into the Invasive Cardiovascular Technology Program is determined after review of the application and completion of all requirements.

Prospective applicants should call the Medical Imaging Department at 281-476-1871 for additional information.

Plan of Study

Central Campus
AMED-INCRV

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<td>Catheterization Lab Fundamentals I</td>
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Capstone Experience: CVTT 2350 Cardiovascular Professional Transition

Medical Imaging, Invasive Cardiovascular Technology, Associate of Applied Science

Information

Medical imaging technology consists of three associate of applied science degrees and four certificate programs. The degree programs are medical radiography, diagnostic medical sonography, and invasive cardiovascular technology. The advanced or enhanced certificate programs are computed tomography, invasive cardiovascular technology, magnetic resonance imaging, and mammography. Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate- Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Invasive Cardiovascular Technology

An invasive cardiovascular technologist is a health care professional who, through the use of specific high-technology equipment and at the direction of a qualified physician, performs procedures on patients leading to the diagnosis and treatment of congenital and acquired heart disease, and peripheral vascular disease. The Invasive Cardiovascular Program Technology (ICVT) prepares students to work in cardiac catheterization laboratories and other cardiac facilities. During clinical assignments, students will assist in performing diagnostic and interventional cardiac catheterization, angiography procedures, and measuring cardiovascular parameters. The ICVT program leads to an associate of applied science (AAS) degree and encompasses a four-semester course of study requiring a total of 60 semester credit hours. Graduates of the program are eligible to sit for the examination to earn a Registered Cardiovascular Invasive Specialist (RCIS) credential offered by Cardiovascular Credentialing International (CCI), after satisfying the examination qualification prerequisite for RCIS235-2013. Website for this exam is: http://www.cci-online.org/content/registered-cardiovascular-invasive-specialist-rcis.
Invasive Cardiovascular Technology

Student Goals

1. Students will be proficient in oral and written communication skills.
2. Students will provide basic patient care and comfort.
3. Students will be clinically competent by performing diagnostic invasive cardiovascular procedures.
4. Students will demonstrate professional/ethical behavior by adhering to professional standards and scope of practice.
5. Students will possess critical thinking skills by demonstrating the ability to recognize, identify and document abnormal anatomic structures.

Admission Criteria

A limited number of students are admitted into the program annually. Class size is determined by the availability of clinical space. All applicants must have completed the prerequisite courses prior to admission to the program. The applicant must submit a current résumé, official transcripts and two letters of recommendation. The applicant must complete and submit an application to the medical imaging department for the invasive cardiovascular technology program. Applicants must attend a mandatory information meeting (dates available on website). The applicant must also submit required health records, CPR certification (American Heart Association- Health Care Provider), criminal background check and drug screen as stated for all medical imaging students – see medical imaging technology and Central Campus section for an explanation of requirements. Acceptance into the invasive cardiovascular technology program is determined after review of the application and completion of all requirements.

Prospective applicants should call the Medical Imaging Department at 281-476-1871 for additional information.

Plan of Study

Central Campus

3MED-INCRV

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Capstone Experience: CVTT 2350 Cardiovascular Professional Transition

Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, under the Educational Programs section of the San Jacinto Community College web catalog.

Medical Imaging, Magnetic Resonance Imaging, Advanced Technical Certificate

Are you fascinated by technology and the inner workings of the human body? If so, a career in computed tomography, mammography or magnetic resonance imaging may be the right path for you. These imaging professionals are qualified to provide patient imaging using...
technology and equipment for CT, mammography and MRI under the supervision of a medical doctor to examine various anatomic structures in the body.

The advanced imaging modalities program at San Jacinto College:

- Prepares the A.R.R.T. registered students to work in advanced modality positions in hospitals and other health care facilities through a variety of clinical rotations.
- Educates students to produce images used for assessment and diagnosis of various medical conditions.
- Encourages students through a variety of methods to be clinically competent, possess critical thinking skills, communicate effectively, both written and orally, and exhibit ethical and professional behavior.

Career Opportunities

Employment outlook is excellent and many of our students gain employment in the field prior to completion of this certificate program.

Graduates of this program are employed in hospitals, clinics and imaging centers.

Earning Potential

Radiologic Technologist median salary: $61,892 per year1

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-476-1871 or cassandra.gossett@sjcd.edu.

Campus

Central Campus

Links

Deadlines and application procedures

Information

Medical imaging technology consists of three associate of applied science degrees and four certificate programs. The degree programs are medical radiography, diagnostic medical sonography, and invasive cardiovascular technology. The advanced or enhanced certificate programs are computed tomography, invasive cardiovascular technology, magnetic resonance imaging, and mammography. Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Association - Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Advanced Technical Certificate

The MRI program builds a foundation of general principles for learning to operate magnetic resonance imaging equipment. The program focuses on building a sound understanding of the underlying scientific theory and routine clinical practice leading to the MRI certification exam. The MRI program also emphasizes the fundamental principle of magnetism and interaction of living matter with magnetic fields as well as introducing the concepts and scientific principles employed in MRI.

Minimum Program Admission Criteria

Applicants must be American Registry of Radiologic Technologies (arrt) registered in one of the following: radiography, nuclear medicine, or radiation therapy or registry eligible and hold a Texas Medical Board Medical Radiologic Technologist License. The applicant must complete and submit an application to the medical imaging department. The applicant must also submit required health records, proof of health insurance, CPR certification (American Heart Association - Health Care Provider), criminal background check and drug screen as stated for all medical imaging students – see paragraph below. Acceptance into the MRI program is determined after review of the application and completion of requirements. Prospective participants should call the medical imaging department at 281-476-1871 for additional information.

Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate-Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Plan of Study

Central Campus

AMRAD-MRI

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San Jacinto College 2018-2019
Program Information
Are you fascinated by technology and the inner workings of the human body? If so, a career in computed tomography, mammography or magnetic resonance imaging may be the right path for you. These imaging professionals are qualified to provide patient imaging using technology and equipment for CT, mammography and MRI under the supervision of a medical doctor to examine various anatomic structures in the body.

The advanced imaging modalities program at San Jacinto College:

- Prepares the A.R.R.T. registered students to work in advanced modality positions in hospitals and other health care facilities through a variety of clinical rotations.
- Educates students to produce images used for assessment and diagnosis of various medical conditions.
- Encourages students through a variety of methods to be clinically competent, possess critical thinking skills, communicate effectively, both written and orally, and exhibit ethical and professional behavior.

Career Opportunities
Employment outlook is excellent and many of our students gain employment in the field prior to completion of this certificate program.

Graduates of this program are employed in hospitals, clinics and imaging centers.

Earning Potential
Radiologic Technologist median salary: $61,892 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-476-1871 or cassandra.gossett@sjcd.edu.
certification (American Heart Association - Health Care Provider), criminal background check and drug screen as stated for all medical imaging students – see paragraph below. Acceptance into the mammography program is determined after review of the application and completion of requirements. Prospective participants should call the medical imaging department at 281-476-1871 for additional information.

Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Association - Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Plan of Study

Central Campus
EMRAD-MAMM

Please see Medical Radiography, Associate of Applied Science (p. 188) page for more information.

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**Capstone Experience:** MAMT 2363 Clinical - Mammography Technology

Medical Laboratory Technology, Associate of Applied Science

Program Information

Do you have a passion for medical discovery? If so, San Jacinto College’s medical laboratory technology degree is for you. Those who dedicate themselves to lab work play a vital role in the health of our society, providing doctors with the critical information needed to properly diagnose, monitor and treat patients.

The San Jacinto College medical laboratory technology program:

- Prepares students to work behind the scenes as a vital member of the health care team in four major areas of clinical lab work, including hematology, chemistry, blood bank and microbiology.
- Introduces students to laboratory safety, hygiene, personal protective equipment, instrumentation, clinical chemistry, hematology, microbiology, serology, immunohematology and urinalysis.
- Teaches students that medical laboratory technicians differ from the other allied health professions because they have minimal contact with patients, yet provide the physician vital information needed to diagnose, assess, monitor and treat patients.
- Offers a 23-month program with a curriculum focused on the major clinical laboratory areas: hematology, chemistry, blood bank and microbiology.
- Is a combination of theory, student lab and clinical education taught on campus and with clinical components taught in area labs.

Upon successful completion of the curriculum, students earn an associate of applied science degree and are eligible to take the national certification exams and apply for the certification examination given by the Board of Registry of the American Society of Clinical Pathologists and/or the National Certification Agency for Medical Laboratory Personnel.

Career Opportunities

With employment of medical laboratory technicians expected to grow by 15 percent within the next eight years, according to the U.S. Bureau of Labor Statistics, graduates enjoy a multitude of career opportunities.

An associate degree in medical laboratory prepares students for careers in:

- Clinical laboratory science
- Histology
- Anatomic pathology
- Medical office technician
- Research assistant

In such environments as:

- Hospital laboratory
- Doctors’ office labs
- Private labs
- Veterinary labs
- Industrial labs
- Centers for Disease Control
- Departments of Health and Human Services
- Biohazardous waste companies
- Police departments
- Industrial labs
Earning Potential
Medical and Clinical Laboratory Technician Median salary: $52,659 per year

1 Source: texaswages.com (http://texaswages.com), Houston region, 2017

Accreditation
The San Jacinto College medical laboratory technology program is accredited by:

National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road, Suite 720
Rosemont, Illinois 60018-5119
847.939.3597
773.714.8880
773.714.8886 (FAX)

For more information contact 281-478-3612 or bertha.rodriguez@sjcd.edu.

Campus
Central Campus

Links
Program Application at https://www.sanjac.edu/career/medical-laboratory-technology

Information
A criminal background check and/or alcohol and drug screening is required of all health science students attending clinical courses or practicums and may be required prior to admission to the program.

The medical laboratory technology program is accredited by the

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
8410 W. Bryn Mawr Ave., Suite 670
Chicago, Illinois, 60631
773.714.8880.

Upon completion of the program, the student is granted an associate of applied science degree and is eligible to apply for the certification examination given by the Board of Registry of the American Society of Clinical Pathologists and/or the National Certification Agency for Medical Laboratory Personnel.

The program curriculum is a balance of general education and technical courses as well as supervised practicum work at area hospitals. This provides the student an opportunity for educational development as well as skill competency.

Prior to entering the medical laboratory technology program, students need to take prerequisite courses: BIOL 2404 Introduction to Anatomy and Physiology (lecture & lab) and MATH 1314 College Algebra or higher.

Medical laboratory technology students must earn a grade of C or above in each medical laboratory technology course and required science courses and maintain an overall grade point average of at least 2.0 in order to graduate from the medical laboratory technology program.

If a student earns a grade of D, W, or F in a medical laboratory technology or science course, the student will be required to repeat the course in which the unsatisfactory grade was earned and pass that course with a grade of C or better in order to progress.

Clinical practicum absences must be made up within the term in which they occur.

Because clinical practicum space is limited, students are admitted on a competitive basis. Applicants or those seeking additional information should contact the medical laboratory program director or the department chair for allied health. Applications for admission to the fall term class are accepted beginning in January.

Students are required to purchase uniforms and accessories. Each student is responsible for his/her own transportation to the clinical areas. Each student who registers for medical laboratory technology is required to purchase student liability insurance the term he/she starts the clinical laboratory practicum.

Philosophy
The philosophy of the Department of Clinical Laboratory Science (CLS) parallels the philosophy of San Jacinto Community College District.

Medical laboratory technology is that allied health care field which performs laboratory test procedures and analyses used in the diagnosis, treatment and prognosis of disease, as well as the maintenance of health. Medical laboratory technicians practice their specialty under the direction of licensed physicians in various settings which include hospitals, private and public health clinics and industrial laboratories.

The medical laboratory technician must be able to apply the knowledge acquired through academic studies and student lab to the clinical setting so that meaningful test results will be obtained to report to the patient’s physician. Graduates of the medical laboratory technology program will be prepared to practice medical laboratory technology in all major areas of the clinical laboratory as contributing members of the health care team.

Program Admission Criteria
Students who apply for admission to the program of medical laboratory technology (MLT) will be selected on the basis of their highest ACT/SAT test scores or their highest grade point average at San Jacinto Community College District, dependent upon the option under which they apply (Option A or Option B following).

Option A: SAT score of 680 or above on test taken prior to April 1995 or a score of 810 or above on an SAT taken on or after April 1, 1995; or an ACT composite score of 18 or above (ACT composite score of 15 or above if taken before October 1989).

Option B: Applicants must complete 10 semester hours at San Jacinto Community College District, as specified below, with no grade lower than C.

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
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</thead>
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<tr>
<td>BIOL 2401</td>
<td>Introduction to Anatomy and</td>
<td>3</td>
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<tr>
<td></td>
<td>Physiology (lecture &amp; lab)</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
<td>3</td>
</tr>
</tbody>
</table>

Applicants seeking admission by Option B may petition the admission coordinator to take a more advanced biology, mathematics or English
course if they have completed the above-stated courses with a grade of C or above at another accredited institution.

Students must apply for admission to the program of medical laboratory technology by submitting a formal application and all required official documents to the Office of Enrollment Services.

Applicants to the medical laboratory technology program will be notified by mail regarding their program admission status. Applicants who are not selected for admission to the medical laboratory technology program must re-apply before the next term. Applicants who are accepted for admission to the medical laboratory technology program but who do not enroll must re-apply. Applicants must meet the College's general admission requirements as well as the program admission criteria.

After acceptance into the program, an applicant must have a physical examination by a licensed physician (M.D., D.O.) and an orientation with a member of the department of clinical laboratory science.

Students are required to purchase uniforms and accessories.

**Plan of Study**

**Central Campus**

<table>
<thead>
<tr>
<th>Course Prerequisites</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology (lecture &amp; lab)</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
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**First Term**

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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>MLAB 1101</td>
<td>Introduction to Clinical Laboratory Science</td>
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<tr>
<td>PLAB 1223</td>
<td>Phlebotomy</td>
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<tr>
<td>MLAB 1415</td>
<td>Hematology</td>
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<tr>
<td>MLAB 1311</td>
<td>Urinalysis and Body Fluids</td>
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**Second Term**

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<tr>
<td>MLAB 1227</td>
<td>Coagulation</td>
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<td>MLAB 1235</td>
<td>Immunology/Serology</td>
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<td>MLAB 2434</td>
<td>Clinical Microbiology</td>
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<tr>
<td>SCIT 1395</td>
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**Summer Year One Term**

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<td>MLAB 1231</td>
<td>Parasitology/Mycology</td>
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**Third Term**

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<tr>
<td>MLAB 2401</td>
<td>Clinical Chemistry</td>
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<td>BCIS 1305</td>
<td>Business Computer Applications</td>
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<td>Speech</td>
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<tr>
<td>MLAB 2266</td>
<td>Practicum II-Medical Laboratory Technician</td>
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<td>Advanced Topic in Medical Laboratory Technician</td>
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<tr>
<td>MLAB 2267</td>
<td>Practicum III-Medical Laboratory Technician</td>
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<td>PSYC 2301</td>
<td>General Psychology</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<tr>
<td>Total Credits</td>
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</tbody>
</table>

**Capstone Experience:** MLAB 2238 Advanced Topic in Medical Laboratory Technician

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; and Creative Arts in the core curriculum.

Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.

**Medical Laboratory Technology, Microscopic Tissue Anatomy, Advanced Technical Certificate**

**Program Information**

This advanced technical certificate is designed for students who have completed the Medical Laboratory Technology Associate of Applied Science degree.

The medical laboratory technician must be able to apply the knowledge acquired through academic studies and student labs to the clinical setting so that meaningful test results can be reported to the patient's physician. Graduates from the medical laboratory technology program will be prepared to practice medical laboratory technology in all major areas of the clinical laboratory as contributing members of the health care team.

While an associate of applied science provides a firm foundation for the entry level clinical laboratory technician, the addition of an advanced technical certificate enhances the student's attractiveness to any employer. Pathologists frequently seek enthusiastic histology technicians to join their teams. An introduction to the healthcare environment and
the histology laboratory includes laboratory safety and infection control; healthcare professions introduction, medical terminology; basic anatomy and physiology, chemistry, laboratory mathematics, communication, ethics, legality, and professional judgment.

Upon successful completion of the program, the student is granted an advanced technical certificate and is eligible to apply for the certification examination given by the Board of Registry of the American Society of Clinical Pathologists and/or the National Accrediting Agency for Clinical Laboratory Scientists.

The program curriculum is a balance of general education and technical courses, as well as supervised practicum work at area hospitals. This provides the student an opportunity for educational development, as well as skill competency.

Prior to entering the Anatomic Tissue Microscopy Advanced Technical Certificate program, the student must have completed an Associate of Applied Science in Medical Laboratory Technology and have made application to take the American Society of Clinical Pathologists examination for medical laboratory technicians.

Career Opportunities
The clinical laboratory technology profession invites advanced skilled technicians to join medical organizations to assist in disease and diagnostic procedures that arrest clinical symptoms. The combination of the Medical Laboratory Technology Associate of Applied Science degree and Advanced Technical Certificate in Histotechnician separates your skill set from those who have not discovered this important pathway to a productive career in healthcare.

Most Histotechnicians work in hospitals or research libraries.

Earning Potential
Medical and Clinical Laboratory Technician (includes histotechnicians) Median salary: $52,659 per year

1 Source: t Dixas.com (http://texaswages.com), Houston region, 2017

Accreditation
The San Jacinto College medical laboratory technology program is accredited by:

National Accrediting Agency for Clinical Laboratory Sciences
5600 N. River Road, Suite 720
Rosemont, Illinois 60018-5119

847.939.3597
773.714.8880
773.714.8886 (FAX)

For more information contact 281-478-3612 or bertha.rodriguez@sjcd.edu.

Campus
Central Campus

Admission
A criminal background check and/or alcohol and drug screening are required by all health science students attending clinical courses or practicum and may be required prior to admission.

Prior to entering the anatomic tissue microscopy advanced technical certificate program, the student must have completed an associate of applied science in medical laboratory technology and have made application to take the American Society of Clinical Pathologists examination for medical laboratory technicians.

Career Opportunities
The clinical laboratory technology profession invites advanced skilled technicians to join medical organizations to assist in disease and diagnostic procedures that arrest clinical symptoms. The combination of the Medical Laboratory Technology Associate of Applied Science degree and Advanced Technical Certificate in Histotechnician separates your skill set from those who have not discovered this important pathway to a productive career in healthcare.

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For more information contact 281-478-3612 or bertha.rodriguez@sjcd.edu.

Campus
Central Campus

Plan of Study
Central Campus
AMLABT-MA

<table>
<thead>
<tr>
<th>Course</th>
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<td>HLAB 1402</td>
<td>Histotechnology I</td>
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<td>HLAB 1405</td>
<td>Functional Histology I</td>
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<td>HLAB 1460</td>
<td>Clinical I - Histologic Technology/ Histotechnologist</td>
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<td>Second Term</td>
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<td>HLAB 1443</td>
<td>Histotechnology II</td>
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<td>HLAB 1446</td>
<td>Functional Histology II</td>
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<tr>
<td>HLAB 1461</td>
<td>Clinical II - Histologic Technology/ Histotechnologist</td>
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<td>Third Term</td>
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<tr>
<td>HLAB 1462</td>
<td>Clinical III - Histologic Technology/ Histotechnologist</td>
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<tr>
<td>HLAB 2341</td>
<td>Registry Review</td>
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</table>

Capstone Experience: HLAB 2341 Registry Review

Medical Radiography, Associate of Applied Science

San Jacinto College 2018-2019
Program Information

Interested in a career where health, science and technology become one? Then look no further than radiography! A radiographer is qualified in providing patient services using a variety of imaging equipment. The typical duties of the radiologic technologist include performing radiologic procedures for diagnostic interpretation, providing patient care, applying principles of radiation protections, evaluating radiographs for technical quality and applying professional judgment.

The San Jacinto College medical radiography program:

- Educates and trains students for entry-level employment in radiography through on-site rotations in area hospitals and clinics.
- Teaches students to be clinically competent, possess critical thinking skills, communicate effectively, both written and orally and ethical and professional behavior.
- Trains students in appropriate patient care, how to accurately set technical factors for radiographic examinations, demonstrate proper radiation safety, demonstrate the ability to modify imaging examinations for non-routine patients as well as critique images for diagnostic quality.

Career Opportunities

Employment outlook is excellent, and many of our students gain employment in the field prior to graduation. Our five year average pass rate on the ARRT national registry exam is 93 percent on the first attempt.

Graduates of this program are employed in hospitals, clinics and imaging centers.

Additional Information

Students are admitted on a competitive basis because clinical space is limited. Those seeking admission should first apply to San Jacinto College and gain acceptance to the College.

The medical radiography program holds information sessions throughout the year for those interested in the program. For dates and times of these information sessions, you can call the medical imaging department at 281-476-1871 or look for times posted on the San Jacinto College Radiography webpage. Attendance at an information session is required prior to application to the program. Program admission criteria and the selection process are explained at the information session.

Accreditation

The medical radiography program at San Jacinto College is accredited by:

The Joint Review Committee on Education in Radiologic Technology
20 North Wacker Dr., Suite 2850
Chicago IL 60606-3182

Phone: 312-704-5300
Email: mail@jrcert.org
Web: www.jrcert.org (http://www.jrcert.org)

Earning Potential

Radiologic Technologist average median salary: $61,892 per year


For more information contact 281-476-1871 or michele.noel@sjcd.edu.

Campuses

Central Campus

Links

Medical Radiography Information Sessions
Course Summary For Medical Radiography AAS
Spring 2019 Medical Radiography Program Admission Criteria
Radiography Program Mission Statement Goals and Student Learning Outcomes
Medical Radiography Program Effectiveness Data
Medical Radiography Program Cost
Advanced Modality Programs: Mammography, Computed Tomography, Magnetic Resonance Imaging

Information

Medical imaging technology consists of three associate of applied science degrees and four certificate programs. The degree programs are medical radiography, diagnostic medical sonography, and invasive cardiovascular technology. The advanced or enhanced certificate programs are computed tomography, invasive cardiovascular technology, magnetic resonance imaging, and mammography. Students selected for any of the medical imaging programs are required to submit a physical exam prior to admission. This physical exam must be consistent with the requirements of the teaching hospitals and agencies the student is assigned during clinical assignments and the performance standards required to function as a student imaging technologist. The exam will also include documentation of any communicable diseases along with immunity to Rubella, Measles, Mumps, and Varicella. Completion of the Hepatitis B series along with updated Tetanus, an annual TB screening and flu vaccine is required. In addition to meeting all other requirements, students entering a medical imaging program will be required to submit a criminal background check and drug screening completed by designated companies, show proof of health insurance, and CPR (American Heart Associate-Health Care Provider) certification. A criminal background check and drug screening are required for all health science students attending imaging courses, and are required prior to admission to the imaging programs.

Medical Radiography Program

Purpose Statement

The purpose of the Medical Radiography Program is to educate and train students for entry level employment in radiography.

The program curriculum is a balance of general education and technical courses, as well as supervised clinical/practicum experience at local hospitals and clinics. The radiography courses utilize both theory and competency-based educational components designed to prepare the student to become a radiologic technologist specializing in radiography.
A radiographer utilizes radiation to produce images of anatomical structures in the body.

Upon completion of the Medical Radiography Program the student is granted an associate of applied science degree, is eligible to apply for the certification examination given by the American Registry of Radiologic Technologists (ARRT), and may obtain a license from the Texas Medical Board.

The Medical Radiography Program at San Jacinto College is accredited by:

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive Suite 2850
Chicago, Illinois 60606

Phone: 312-704-5300
Email: mail@jrcert.org
Web: www.jrcert.org (http://www.jrcert.org)

The program effectiveness goals of the Medical Radiography Program are as follows:

1. Graduates will pass the national certification examination on the 1st attempt.
2. Graduates will be gainfully employed.
3. Students will complete the program within two years of acceptance.
4. Employers will be satisfied with program graduates.
5. Graduates will be satisfied with the quality of their education received.

**Student Goals and Student Learning Outcomes**

The student goals for the Medical Radiography Program are as follows:

1. Students will be clinically competent.
2. Students will possess critical thinking skills.
3. Students will communicate effectively.
4. Students will demonstrate professionalism.

The student learning outcomes for the Medical Radiography Program are as follows:

1. Students will demonstrate appropriate patient care.
2. Students will accurately adjust technical factors for radiographic examinations.
3. Students will properly position patients for radiographic examinations.
4. Students will demonstrate proper radiation safety.
5. Students will demonstrate ability to modify imaging examinations for non-routine patients.
6. Students will critique images for diagnostic quality.
7. Students will demonstrate effective oral communication skills.
8. Students will demonstrate effective written communication skills.
9. Students will demonstrate professional behavior.
10. Students will demonstrate ethical behavior.

**Program Admission Criteria**

This is a selective admission program. A limited number of students are admitted into the program bi-annually. Class size is determined by the availability of clinical space. Limited enrollment ensures a quality laboratory and clinical experience needed to become a competent entry level radiographer. To be considered for selection to the Medical Radiography Program the following steps must be completed:

2. Provide Official Transcripts
   a. High School Diploma or GED Certificate required.
   b. Students with any transfer credits must have college transcripts analyzed by San Jacinto College (enrollment services transcript evaluation) prior to submitting an application.
   c. Medical Imaging Department Chair has final approval of all transferred courses that apply toward the degree in Medical Radiography.
   d. Transcripts from other colleges must be official and sent to:
      i. Office of Enrollment Services, and
      ii. Medical Radiography Office
3. Completion of all of the following prerequisite courses with a minimum of a “C” before admission to the program.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology (lecture &amp; lab)</td>
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<tr>
<td>or BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>&amp; BIOL 2101</td>
<td>Human Anatomy and Physiology I (Lab)</td>
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<tr>
<td>or BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<td>&amp; BIOL 2102</td>
<td>Human Anatomy and Physiology II (Lab)</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>RADR 1201</td>
<td>Introduction to Radiography</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td>3</td>
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</table>

Any of the following support courses requires a minimum of a “C” also and if not achieved the course must be retaken until successful.

- Social and Behavioral Sciences
- Humanities and Fine Arts
- ENGL 2311 Technical and Business Writing

In order for credit earned in a required biology course to be applied to the radiography technology program, credit must have been earned within five (5) years of the first term in which the student enrolls in the program and with an earned grade of a C or above. In order for credit earned in a required RADR 1201 Introduction to Radiography course to be applied to the radiography technology program, credit must have been earned within three (3) years of the first term in which the student enrolls in the program and with an earned grade of a C or above.

Higher level math such as Calculus may be evaluated for possible substitution if a student was placed out of college algebra. A higher level English course may be evaluated for possible substitution if a student has placed into a higher level English. Substitutions must be approved by the Department Chair and Dean of Health Sciences.

1. Graduates will be gainfully employed.
2. Graduates will be satisfied with the quality of their education received.
3. Completion of the program required entrance examination (HESI A2) must be submitted with application. A cumulative score of 70% and a score of 70% in each section is highly recommended.
5. Attend a mandatory information meeting as posted on the San Jacinto College Website or by calling 281-476-1871 for dates.
6. Receive and complete a Medical Imaging application by deadline of June 1, October 15, or March 8.
Selection Criteria
1. Students who apply for admission to the Medical Radiography Program will be selected based on the total score on the application rubric to include both GPA and HESI A2 entrance examination scores. Meeting minimal entry requirements does not guarantee program admission.

Application Periods
The Medical Radiography Program accepts applicants three (3) times a year.

Application periods are:
• April 1 through June 1, for fall admission;
• September 1 through October 15, for spring admission; and
• January 15 through March 8 for summer admission.

Applicants will be notified regarding their selection for admission into the Medical Radiography Program. Applicants not selected for admission must re-apply to be considered for future admission. Applicants who are selected for admission into the Medical Radiography Program, but do not accept the position or do not complete the enrollment process must also re-apply. It is the student’s responsibility to stay current with any changes in program requirements.

Transfer Students
Course work from another radiography program will be evaluated on an individual basis by the Department Chair and the Admission Appeals Committee. A grade of “C” or better is required on all transferred prerequisite, general education, and program specific courses. The student requesting transfer must submit a request by the Medical Radiography Admission Appeals Committee and be granted an interview. Transfer students from another program will be admitted on a space-available basis.

Student Progression
If a student earns a grade of D, W, or F in a medical imaging (RADR) course, the student will not be permitted to continue or to graduate from the program until that course has been repeated and a grade of C or above has been earned. Three grades of D, F, or W in any combination from a RADR course will cause permanent suspension from the Medical Radiography Program. A student may appeal their suspension with the Medical Radiography Appeals Committee.

Plan of Study
Central Campus
3MED-RAD

<table>
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<tr>
<th>Course Prerequisites</th>
<th>Course Title (Lecture &amp; Lab)</th>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology</td>
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<td>BIOL 2301 &amp; BIOL 2101</td>
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First Term
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<th>Title (Lecture &amp; Lab)</th>
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<td>RADR 2209</td>
<td>Radiographic Imaging Equipment</td>
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<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
<td>3</td>
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Second Term
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<tr>
<th>Course</th>
<th>Title (Lecture &amp; Lab)</th>
<th>Credits</th>
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<td>RADR 2335</td>
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<tr>
<td>RADR 2217</td>
<td>Radiographic Pathology</td>
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Total Credits 64

Capstone Experience: Eligible for American Registry of Radiologic Technologists National Certification Exam.

1 Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, which is published in the San Jacinto Community College Web Catalog.
Mental Health Clinical and Counseling Psychology, Associate of Applied Science

Program Information

Are you a caring person, a good listener, and compassionate to others’ needs? Psychiatric aides and technicians observe and record patient behavior and present their findings to counselors, nurses and other professional staff. They intervene in crisis situations, actively moderate client behavior and assist with feeding, moving, dressing patients, personal hygiene and activities of daily living. If this sounds like you, San Jacinto College’s mental health counseling career path is for you.

The San Jacinto College mental health services program:

- Is specifically designed to train mental health technicians, both psychiatric aides and technicians.
- Prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures.
- Provides psychiatric aides and technicians with the skills to observe and record patient behavior and present their findings to counselors, nurses and other professional staff.
- Offers training to intervene in crisis situations, actively moderate client behavior and assist with feeding, moving, dressing patients, personal hygiene and activities of daily living.

Career Opportunities

Graduates of our program will be able to work in substance abuse and mental health facilities in both private and nonprofit organizations and find opportunities in:

- Hospitals
- In-patient psychiatric hospitals
- Out-patient hospitals
- Veteran affairs clinics
- Nursing homes
- Research facilities
- Pain management clinics
- Drug rehab centers
- Counseling centers

Earning Potential

Psychiatric Aid median salary: $24,813 per year¹

Psychiatric Technician median salary: $32,617 per year¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-998-6150 ext. 7146 or cayman.tirado@sjcd.edu

Campus

North Campus

Information

Mental health technician training prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures. Potential work opportunities include:

- Aides within inpatient/outpatient psychiatric facilities
- Day treatment centers
- Counseling centers
- Rehabilitation facilities

The mental health services program is designed to train mental health technicians and prepare individuals to meet the requirements for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.). Each program offers a practicum class which allows students to apply classroom skills in a treatment setting.

The Mental Health Technician (Psychiatric Aide/Technician) Certificate of Technology prepares students to work with disturbed individuals following physician instructions and hospital procedures. Psychiatric aides and technicians observe and record patient behavior and present findings to counselors, nurses, and other professional staff. They intervene in crisis situations, actively moderate client behavior, and assist with feeding, moving, dressing patients, personal hygiene, and activities of daily living.

The Substance Abuse Counseling Certificate of Technology prepares individuals to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse. Graduates will be able to identify appropriate assessments, diagnosis, and treatment of individuals who are, or have been, engaged in substance abuse. The program, plus 4,000 hours of paid work experience, provides individuals with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

The combination of the certificates of technology and general education leads to an Associate of Applied Science in mental health clinical and counseling psychology. Students who do not have an associate degree (or higher) in a behaviorally related field will not be eligible for full licensure in the State of Texas. An associate degree (or higher) is required for full licensure. A student can complete the certificate of technology course work, enter the workforce as a counseling intern and continue course work towards an associate degree before receiving their L.C.D.C.

In addition to the certificates listed above, we are now offering the Substance Abuse Prevention Specialist Occupational Certificate. This 20-hour certificate enables students to obtain a license as a Texas Certified Prevention Specialist (CPS), and the curriculum is approved by the Texas Department of Health Services. The coursework, combined with the capstone experience at a prevention approved training center
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View application and information packet here: https://www.sanjac.edu/career/mental-health-services

Plan of Study

North Campus
3MH-PSYC

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<td>SCWK 1313</td>
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<td>PSYC 2301</td>
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<td>ENGL 1301</td>
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<td>PSYT 1371</td>
<td>Mental Health Legal and Ethical Issues</td>
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**Summer Year Two Term**

| DAAC 2366 | Practicum - Substance Abuse/Addiction Counseling | 3 |
| **Credits** | | **3** |

**Total Credits** | **57**

**Capstone Experience:** PMHS 2366 Practicum - Mental Health Services Technician and DAAC 2366 Practicum - Substance Abuse/Addiction Counseling

**Note:** Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.

Mental Health Technician, Occupational Certificate

**Information**

Mental health technician training prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures. Potential work opportunities include:

- Aides within inpatient/outpatient psychiatric facilities
- Day treatment centers
- Counseling centers
- Rehabilitation facilities

The mental health services program is designed to train mental health technicians and prepare individuals to meet the requirements for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.). Each program offers a practicum class which allows students to apply classroom skills in a treatment setting.

The Mental Health Technician (Psychiatric Aide/Technician) Certificate of Technology prepares students to work with disturbed individuals following physician instructions and hospital procedures. Psychiatric aides and technicians observe and record patient behavior and present findings to counselors, nurses, and other professional staff. They intervene in crisis situations, actively moderate client behavior, and assist with feeding, moving, dressing patients, personal hygiene, and activities of daily living.

The Substance Abuse Counseling Certificate of Technology prepares individuals to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse. Graduates will be able to identify appropriate assessments, diagnosis, and treatment of individuals who are, or have been, engaged in substance abuse. The program, plus 4,000 hours of paid
work experience, provides individuals with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

The combination of the certificates of technology and general education leads to an Associate of Applied Science in mental health clinical and counseling psychology. Students who do not have an associate degree (or higher) in a behaviorally related field will not be eligible for full licensure in the State of Texas. An associate degree (or higher) is required for full licensure. A student can complete the certificate of technology course work, enter the workforce as a counseling intern and continue course work towards an associate degree before receiving their L.C.D.C.

In addition to the certificates listed above, we are now offering the Substance Abuse Prevention Specialist Occupational Certificate. This 20-hour certificate enables students to obtain a license as a Texas Certified Prevention Specialist (CPS), and the curriculum is approved by the Texas Department of Health Services. The coursework, combined with the capstone experience at a prevention approved training center enables students to work in the area of drug prevention in a variety of settings that include: community agencies, school districts, out-patient centers, and various others in the greater Houston area. Once coursework is completed, students will need to enroll in the capstone prevention practicum (200 hours) and pass a state exam in order to obtain their license as a Certified Prevention Specialist (CPS).

View application and information packet here: https://www.sanjac.edu/career/mental-health-services

Plan of Study

North Campus
6MH-TECH

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<td>PSYT 1371</td>
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Capstone Experience: PMHS 2366 Practicum-Mental Health Services Technician

Note: Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.

Mental Health, Substance Abuse Counseling, Level 2 Certificate

Substance Abuse Counseling

Are you a compassionate, willing listener who is ready with advice or a kind word during a difficult time? If so, San Jacinto College can give you the training you need to provide counseling and other specialized services to individuals experiencing the effects of substance abuse.

The San Jacinto College substance abuse counseling training program:

- Prepares students to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse.
- Teaches graduates to identify and administer appropriate assessments, diagnosis and treatment of individuals who are, or have been, engaged in substance abuse.
- Requires an internship class where students are placed into a substance abuse facility to apply knowledge learned in the program.
- Provides students with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

Substance Abuse Prevention

This certificate provides students with the knowledge and skills to help prevent drug and alcohol use and abuse within schools, neighborhoods and greater communities.

This program qualifies individuals to work as a Certified Prevention Specialist (CPS) in the field of substance abuse.

Students will learn to identify the stages of addiction, identify evidence-based prevention strategies within a cultural context, identify risk and protective factors for substance use disorders, describe resources for prevention program planning, and explain program evaluation methods.

Career Opportunities

Counseling:

- Hospitals
- In-patient drug rehab centers
- Out-patient clinics
- Veteran affairs clinics
- Alternative schools
- Research facilities
- Pain management clinics
• Drug rehab centers
• Counseling centers

Prevention:
• K-12 schools
• Juvenile justice settings (alternative schools or youth offender programs)
• Local community coalitions
• At-risk programs

Earning Potential
Mental Health and Substance Abuse Social Worker median salary: $47,202\(^1\) per year
Substance Abuse and Behavioral Disorder Counselors median salary: $45,311\(^1\) per year

\(^1\) Source: texawages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-998-6150 ext. 7146 or cayman.tirado@sjcd.edu

Campus
North Campus

Information
Mental health technician training prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures. Potential work opportunities include:

• Aides within inpatient/outpatient psychiatric facilities
• Day treatment centers
• Counseling centers
• Rehabilitation facilities

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View application and information packet here: https://www.sanjac.edu/career/mental-health-services

Plan of Study
North Campus

5MH-SAC

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<td>DAAC 1311</td>
<td>Counseling Theories</td>
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<td>DAAC 1304</td>
<td>Pharmacology of Addiction</td>
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<td>PSYC 2301</td>
<td>General Psychology</td>
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<tr>
<td>PSYT 1371</td>
<td>Mental Health Legal and Ethical Issues</td>
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<td><strong>Total Credits</strong></td>
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- **First Term**

- **Second Term**
  
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<td>SCWK 2301</td>
<td>Assessment and Case Management</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 2341</td>
<td>Counseling Alcohol and Other Drug Addictions</td>
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- **Third Term**

- **Capstone Experience:** DAAC 2366 Practicum - Substance Abuse/Addiction Counseling

| Credits | 3 |
| Total Credits | 33 |
Note: Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.

Mental Health, Substance Abuse Prevention Specialist, Occupational Certificate

Substance Abuse Counseling
Are you a compassionate, willing listener who is ready with advice or a kind word during a difficult time? If so, San Jacinto College can give you the training you need to provide counseling and other specialized services to individuals and families suffering the devastating effects of substance abuse.

The San Jacinto College substance abuse counseling training program:

• Prepares students to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse.
• Teaches graduates to identify and administer appropriate assessments, diagnosis and treatment of individuals who are, or have been, engaged in substance abuse.
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Plan of Study
North Campus
6MH-SAPS

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<td>Mental Health Legal and Ethical Issues</td>
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**Capstone Experience:** DAAC 1264 Practicum - Substance Abuse/Addiction Counseling (Prevention)

Mental Health-Substance Abuse Counseling, Occupational Certificate

Substance Abuse Counseling
Are you a compassionate, willing listener who is ready with advice or a kind word during a difficult time? If so, San Jacinto College can give you the training you need to provide counseling and other specialized services to individuals and families suffering the devastating effects of substance abuse.

The San Jacinto College substance abuse counseling training program:
- Prepares students to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse.
- Teaches graduates to identify and administer appropriate assessments, diagnosis and treatment of individuals who are, or have been, engaged in substance abuse.
- Requires an internship class where students are placed into a substance abuse facility to apply knowledge learned in the program.
- Provides students with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

Substance Abuse Prevention
This certificate provides students with the knowledge and skills to help prevent drug and alcohol use and abuse within schools, neighborhoods and greater communities.

This program qualifies individuals to work as a Certified Prevention Specialist (CPS) in the field of substance abuse.

Students will learn to identify the stages of addiction, identify evidence-based prevention strategies within a cultural context, identify risk and protective factors for substance use disorders, describe resources for prevention program planning, and explain program evaluation methods.

Career Opportunities
Counseling:
- Hospitals
- In-patient drug rehab centers
- Out-patient clinics
- Veteran affairs clinics
- Alternative schools
- Research facilities
- Pain management clinics
• Drug rehab centers
• Counseling centers

**Prevention:**
• K-12 schools
• Juvenile justice settings (alternative schools or youth offender programs)
• Local community coalitions
• At-risk programs

**Earning Potential**
Mental Health and Substance Abuse Social Worker median salary: $47,202¹ per year
Substance Abuse and Behavioral Disorder Counselors median salary: $45,311¹ per year

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-998-6150 ext. 7146 or cayman.tirado@sjcd.edu

**Campus**
**North Campus**

**Information**
Mental health technician training prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures. Potential work opportunities include:

• Aides within inpatient/outpatient psychiatric facilities
• Day treatment centers
• Counseling centers
• Rehabilitation facilities

The mental health services program is designed to train mental health technicians and prepare individuals to meet the requirements for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.). Each program offers a practicum class which allows students to apply classroom skills in a treatment setting.

The Mental Health Technician (Psychiatric Aide/Technician) Certificate of Technology prepares students to work with disturbed individuals following physician instructions and hospital procedures. Psychiatric aides and technicians observe and record patient behavior and present findings to counselors, nurses, and other professional staff. They intervene in crisis situations, actively moderate client behavior, and assist with feeding, moving, dressing patients, personal hygiene, and activities of daily living.

The Substance Abuse Counseling Certificate of Technology prepares individuals to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse. Graduates will be able to identify appropriate assessments, diagnosis, and treatment of individuals who are, or have been, engaged in substance abuse. The program, plus 4,000 hours of paid work experience, provides individuals with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

The combination of the certificates of technology and general education leads to an Associate of Applied Science in mental health clinical and counseling psychology. Students who do not have an associate degree (or higher) in a behaviorally related field will not be eligible for full licensure in the State of Texas. An associate degree (or higher) is required for full licensure. A student can complete the certificate of technology course work, enter the workforce as a counseling intern and continue course work towards an associate degree before receiving their L.C.D.C.

In addition to the certificates listed above, we are now offering the Substance Abuse Prevention Specialist Occupational Certificate. This 20-hour certificate enables students to obtain a license as a Texas Certified Prevention Specialist (CPS), and the curriculum is approved by the Texas Department of Health Services. The coursework, combined with the capstone experience at a prevention approved training center enables students to work in the area of drug prevention in a variety of settings that include: community agencies, school districts, out-patient centers, and various others in the greater Houston area. Once coursework is completed, students will need to enroll in the capstone prevention practicum (200 hours) and pass a state exam in order to obtain their license as a Certified Prevention Specialist (CPS).

View application and information packet here: https://www.sanjac.edu/career/mental-health-services

**Plan of Study**
**North Campus**
6MH-SAC

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**Capstone Experience:** DAAC 2366 Practicum - Substance Abuse/Addiction Counseling

*Note: Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.*
Nursing, Associate Degree Nursing,
Generic Program, Associate of
Applied Science

Program Information
If you have a compassionate, take-charge personality with a desire to make patients feel comforted in the face of illness, then a career in nursing may be the right career for you. As the population is quickly expanding and aging the need for quality health care is greater than ever, and professionals who can provide that care are in short supply. A nursing degree from San Jacinto College will change your life and help save the lives of others.

The San Jacinto College Associate of Applied Science Degree in Nursing:

• Qualifies students to apply for the National Council Licensure Exam—Registered Nurse (NCLEX-RN) required of all registered nursing candidates. A license to practice as a registered nurse (RN) is granted by the state to graduates who pass this examination.
• Educates nurses on the college campus where they share learning experiences with other college students. Experience in patient care is received in hospitals and other agencies in the community.
• Teaches and supervises student clinical experiences concurrently with theory courses and provides simulation clinical experience.
• Focuses on helping students develop as individuals and as responsible citizens who will become competent practitioners in professional nursing.

Accredited by:
The Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road NE, Suite 850
Atlanta, Georgia 30326
Office: 404-975-5000
Fax: 404-975-5020

Approved by the
Texas Board of Nursing (BON)
333 Guadalupe #3-460
Austin, Texas 78701
Office: 512-305-7400

Career Opportunities
As a nurse, the job opportunities are endless. Upon successful completion of the curriculum and passing of the NCLEX-RN, graduates are entering a field of infinite professional challenges. The registered nurse is seen as a vital member of the health care team and is responsible for coordinating the majority of the care related to the patient. As the first point of contact between the patient and physician, professional nurses encompass all levels of health and well-being.

The registered nurse can secure employment in:
• Hospitals and clinics
• Home health and community health settings
• Education
• Research and computer/technology

San Jacinto College has transfer agreements with universities so our graduates can pursue bachelor’s degrees.

Admission Information
Applications for entry into the Central and North Campus programs are accepted each year in the fall and spring. For dates please see www.sanjac.edu/nursing. The program is four and a half semesters long.

The associate degree nursing program prepares people with no professional nursing experience for entry into the field of nursing. For students who already have medical experience as a licensed vocational nurse or paramedic, we offer the transition nursing program (p. 203) at our South Campus.

Earning Potential
Registered nurses median salary / year: $77,987


For more information contact the following:

Central Campus
Ira Robins - Sr. Administrative Assistant (A-K)
281-476-1501 x 1440 Ira.Robins@sjcd.edu

Linda Navejar - Sr. Administrative Assistant (L-Z)
281-476-1501 x1441 Linda.Navejar@sjcd.edu

North Campus
281-998-6150 ext. 7726 or email rn-nursingnorth@sjcd.edu

Campuses
Central Campus
North Campus

Fax: 512-305-7401
Admission

Generic Associate Degree Nursing Program Central and North Campuses

A generic student is a novice in health care who generally does not have any formal nursing education. Successful completion of the generic ADN program by these students will qualify graduates to apply for the National Counsel Licensure Examination for Registered Nurse (NCLEX-RN).

Students applying for admission to the generic ADN program must submit the following items:

1. Application for Admission to San Jacinto College via the website at sanjac.edu/apply (provided online).
2. Completion of the Associate Degree Nursing Program Application (provided online) during the application period.
3. Application Periods:
   The ADN program accepts applicants twice a year. Associate degree nursing program applications can be obtained at www.sanjac.edu/nursing during the following periods:
   - Fall Application Period: Feb. 2 - April 2
   - Spring Application Period: June 1 - Aug. 3

Students are strongly encouraged to contact a Counselor or Education Planner in the Educational Planning & Counseling Center to assist the San Jacinto College and ADN Admissions process. Please call 281-998-6150 ext. 1014 or 2317 to schedule an appointment.

4. Selection criteria.
   Students must apply for admission to the Associate Degree Nursing program by submitting an Associate Degree Nursing program application and packet with ALL required official documents at the same time to the ADN office no later than the end of the application period.

Students who apply for admissions to the Associate Degree Nursing program will be selected on the basis of the highest score on the admissions and scoring rubric. The rubric consists of points given for the grade obtained on the prerequisite courses (see program specific prerequisites below), HESI A2 results, overall GPA and the completed application packet. Meeting minimum admissions requirements does not guarantee program admission.

All applicants must have completed all college preparatory courses and be "College ready" as recognized by San Jacinto College District. "College ready" is determined as having the following skills levels: Reading 7, Writing 7 and Math 9.

5. Code of Conduct
   All students admitted to the ADN program are expected to maintain the highest personal and professional standards of conduct in class and clinical, in accordance with College policies and procedures, the College Student Handbook, the ADN Department Student Handbook and clinical facility policies and procedures which are used as extended campus sites. Any information indicating that such standards are not adhered to is subject to review by the department chair, and/or members of the nursing department faculty, and may result in a recommendation to the College for dismissal from the program.

6. Official Transcripts must be submitted with the application packet.
   a. Applicants must submit official transcripts from all colleges previously attended, transcripts should be mailed directly to the Central Campus Office of Enrollment Services. Transcripts should be requested as soon as possible. Applicants are encouraged to begin accessing their transcripts early in the application process to ensure that all required documents are available for review. All course work taken outside of the San Jacinto College District is required to be evaluated for transferability of credits towards the ADN degree.
   b. A minimum cumulative GPA of 2.5 is required for all applicants.
   c. Submit all official transcripts sealed from other colleges and San Jacinto College transcripts with ADN application.

7. HESI A2 Admissions Test
   Applicants seeking admissions must take an official Nursing Admissions Assessment Exam (HESI A2). A composite score of 75 percent in EACH section of reading comprehension, grammar, vocabulary, anatomy and physiology, and math is required. The learning styles section is required, but will not be used in determining admissions. Submit all HESI A2 admissions test scores with the ADN application packet. Official test scores should be requested as soon as possible. Please visit https://www.sanjac.edu/apply-register/overview/testing/hesi-%E2%80%93-rn-information (Testing Center-HESI website) for test dates on Central Campus.

8. A Criminal Background Check and Drug Screen
   All applicants are required to complete a criminal background check and drug screen as part of the application/admissions process. According to the Texas Board of Nursing (BON) effective Jan. 1, 1996 a person who has been convicted of a felony that relates to the duties and responsibilities of a licensed registered nurse may be disqualified from obtaining licensure as a licensed registered nurse (213.28 Board of Nurse Examiners for the State of Texas, Rules and Regulations, Sept. 2004). For further inquiry the applicant should directly contact the Texas Board of Nursing. The procedure for completing the criminal background check and drug screen requirements can be found on the ADN website.

9. CPR Card and Immunization documentation must be submitted with the ADN application packet.
   In order for an ADN application to be accepted, students must have completed a minimum of:
   a. CPR card from the American Heart Association Health Care Provider (online courses are not accepted)
   b. Varicella Immunization #1, #2 and a positive titer
   c. Hepatitis B series and a positive titer
   d. Hepatitis C titer
   e. Or TWINRIX series completed and a positive titer
   f. Measles, Mumps, and Rubella (MMR) Immunizations #1, #2 and a positive titer
   g. Tdap (Tetanus, Diphtheria and Pertussis) within the last 10 years
   h. Current Flu vaccination
   i. TB Skin Test (within 12 months)
   j. Chest X-Ray (if applicable)

   The Texas Administrative Code Rule 97.64 states that enrolled students may not participate in course work activities, including direct patient contact, until full vaccination series have been completed.

   Titeres for MMR, Varicella, and Hepatitis B are required to be on file in the student’s record prior to the end of the first semester of the ADN program.

10. Health-Physical Examination is required.
Evidence of physical and emotional fitness upon admission and throughout the program is expected and is subject to review by the Associate Degree Nursing department and medical opinions or policy of hospital/agencies which are used as extended campus sites for assigned educational experiences.

A physical examination must be passed prior to entry into the ADN program after a student has been selected and accepted into the program. Physical exams may be scheduled with a private physician/nurse practitioner/physician assistant utilizing the forms issued by the Associate Degree Nursing program upon acceptance. The physical examination must demonstrate that the student is physically and emotionally fit to meet all requirements of direct patient care without any limitations and be free from all communicable diseases.

Central Campus

Application Dates

The application period for the upcoming term has closed. Please check back here for updates on future application dates. Thank you for your interest!

Prepare Application Documents

• Please remember to make copies before turning them in. Unfortunately, we are not able to make copies for applicants.
• All applications must be typed. Handwritten applications are not accepted.
• Submit all documents in an 8.5” x 11” envelope.

Submit the Following Three (3) Documents to the Nursing Department

1. Typed application
2. HESI score. Each section must be at least 75 and above to be considered. We will accept up to two (2) HESI test scores. Only the highest scores from each test will be calculated.
3. Official sealed transcripts from all schools attended. If you attended San Jacinto College, we will need your transcript included in your packet. It can be an unofficial copy, but the other transcripts must be official in a sealed envelope.
   • Note: If you have grades in progress, you must bring in updated, official transcripts at the end of the term or your application will not be complete. Incomplete applications cannot be evaluated for admission into the program.
   • It is acceptable to have up to only one (1) pre-requisite course in progress.

Drug Screening


CastleBranch is the document manager for the Associate Degree Nursing department. Applicants will upload all documentation to their website. All documents are due to CastleBranch by the closing date of the application period.

A negative drug screen must be returned.

Please use code NP76 for the Drug Test and Medical Document Manager

HESI A2 Testing

1. Biology is no longer a required subject on the HESI
2. Department ID: 198971
3. The Central Campus Testing Center offers the HESI test, but if dates are not convenient, you may take the test at another location, as long as they meet our requirements. Other locations are available by searching the internet.
4. The Testing Center can be reached at 281-998-6150, ext. 2025
5. All A2N HESI scores are acceptable within a 3-year limit.

Important Information

1. The Associate Degree Nursing evening program is no longer offered at the Central Campus.
2. Please disregard the request for a physical exam. That is only required once you are accepted into the program.
3. The Blue Card is not needed for CastleBranch until your name has been submitted to the Board of Nursing. That information comes later in the process.
4. You must have insurance upon acceptance into the program and it cannot lapse during any time while in the program.
5. The Gold Card is not considered health insurance.
6. You also have a fast track or rapid series option for Heb B, which reduces the wait between shots.

Additional Information

Please review the information provided below, as it is vital to your success in the Associate Degree Nursing program.

• (Links)
• Steps for Success
• Course Sub form
• Criteria and Pre-requisites
• Immunization FAQ’s
• HESI FAQ’s
• Spring Application (fillable)
• Success Indicators – A.D.N. Central Campus

Bachelor of Science in Nursing (BSN)

After graduating from our program, we strongly encourage you to pursue an RN-to-BSN degree. Here is a list of all programs in Texas.

Student Achievement Data San Jacinto College

Associate Degree Nursing – Central Campus

• 91.67 % Licensure Examination Pass Rate- The San Jacinto College Associate Degree Nursing Programs at Central prepares students throughout the nursing program for licensure examination success.
• 96.53 % graduation rate Central Campus -The Associate Degree Nursing (ADN) Programs celebrates one of the highest graduation rates for Associate Degree Nursing in the state of Texas. This is reflective of the “Student Success” commitment San Jacinto College District promotes and fosters across all academic environments.
• 89% Post-Graduation Employment Central Campus- Students who complete the ADN program are successful in securing entry level professional roles. The ADN program’s commitment to “Student Success” is evident in our graduates being recognized as robust members of the professional nursing community. These accolades are observed across the Houston/Galveston/Humble/Katy areas
in the sense of the graduates being invited to join various Nurse Internships to promote the role of the professional nurse.

Did you know that the ADN program has been producing great nurses for more than 50 years! Come learn more about the nursing program and the benefits of earning your associate degree in nursing at San Jacinto College. There are many scholarship opportunities available to support our students. We look forward to seeing you!

**Location**
Health Science Building

C-11.1057 (A-K last name)
C-11.1059 (L-Z last name)

**Contacts**
Ira Robins - Sr. Administrative Assistant (A-K)
281-476-1501 x 1440
Ira.Robins@sjcd.edu

Linda Navejar - Sr. Administrative Assistant (L-Z)
281-476-1501 x1441
Linda.Navejar@sjcd.edu

Please email Ms. Navejar or Mrs. Robins any questions.

There is a 24-hour response time window.

**North Campus (Extension Site for Central Campus Program)**

**Application Dates**
Spring 2019 - August 6 - October 8 at noon

**Information Sessions**
Held Mondays and Thursdays starting August 13 – September 27

Mondays at 10:00 a.m.

Thursdays at 3:00 p.m.

Location: Building 17, Room 1079 (N-17.1079)

**HESI A2 Testing**
North Campus Testing Date: TBD

Contact rn-nursingnorth@sjcd.edu to register for HESI A2.

**Important Information**
Please refer to the documents listed below for more detailed information:

ADN-RN North 201920 Admission Criteria (http://www.sanjac.edu/sites/default/files/201920%20Admission%20Criteria.pdf)

ADN-RN North 201920 Fillable Application (http://www.sanjac.edu/sites/default/files/201920%20Fillable%20Application%20for%20Associate%20Degree%20Nursing%20North.pdf)

ADN-RN North 201920 Immunization Schedule (http://www.sanjac.edu/sites/default/files/201810%20Admission%20Immunization%20FAQ%20North.pdf)

ADN-RN North 201920 Course Curriculum (http://www.sanjac.edu/sites/default/files/201810%20Curriculum%20North.pdf)


All documents are subject to change.

**Student Achievement Data San Jacinto College Associate Degree Nursing – North Campus**

- **86.11 % Licensure Examination Pass Rate** - The San Jacinto College Associate Degree Nursing Programs prepares students throughout the nursing program for licensure examination success.

- **97.99 % Graduation Rate** - The Associate Degree Nursing (ADN) Programs celebrates one of the highest graduation rates for Associate Degree Nursing in the state of Texas. This is reflective of the “Student Success” commitment San Jacinto College District promotes and fosters across all academic environments.

- **Post-Graduation Employment** - North Campus admitted its first cohort fall, 2014 - Employment Data is not available at this time.

**Plan of Study**
Central and North Campuses
3NUR-ADN

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**Summer Year One Term**

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Nursing, LVN/Paramedic to RN Transition Nursing, Associate of Applied Science

Program Information
Are you already working as a Licensed Paramedic or Licensed Vocational Nurse in Texas? Are you ready to expand your practice to the associate degree nursing level at an accelerated pace?

If so, the Associate Degree in Nursing (A.D.N.) transition program may be just right for you!

The San Jacinto College associate of applied science degree in nursing:

• Qualifies students to apply for the National Council Licensure Exam-Registered Nurse (NCLEX-RN) required of all registered nursing candidates. A license to practice as a registered nurse (RN) is granted by the state to those graduates who pass this examination.
• Educates nurses on the College campus where they share learning opportunities with other experienced, professional college students in the health care industry. Student learning is also conducted in local hospitals, community agencies and the San Jacinto College South Campus state-of-the-art simulation lab.
• Provides student clinical experiences concurrently with theory courses in general and specialty professional nursing education, taught by faculty who instruct and supervise.
• Focuses on helping students develop as individuals and responsible citizens who become competent practitioners in professional nursing.

Career Opportunities
As a nurse, the job opportunities are endless. Upon successful completion of the curriculum and passing of the NCLEX-RN, graduates are entering a field of infinite professional opportunities and challenges. The registered nurse is seen as a vital member of the health care team and is responsible for being the integral part of coordinating the majority of the care related to the patient. As the first point of contact between the patient and health care providers, the role of professional nurse encompasses all levels of health and well-being.

The registered nurse can secure employment in:

• Hospitals and clinics
• Home health and community health settings
• Education
• Research and computer/technology arenas

Verification of Workforce Competencies:

1. **Capstone Experience** - RNSG 2130 Professional Nursing Review and Licensure Preparation

2. **External Learning Experience** - RNSG 2160 Clinical: Nursing Management of Client Care

1 Students must satisfactorily complete BIOL 2301 Human Anatomy and Physiology I (Lecture)/BIOL 2101 Human Anatomy and Physiology I (Lab), BIOL 2302 Human Anatomy and Physiology II (Lecture)/BIOL 2102 Human Anatomy and Physiology II (Lab), BIOL 2320 Microbiology for Health Science Majors (Lecture)/BIOL 2120 Microbiology for Health Science Majors (Lab) and ENGL 1301 Composition I to enroll in any nursing course. Biology courses must be taken within the last five years with a passing grade no less than C. College Preparatory courses, which have numbers beginning with zero (0), do not apply toward the associate of applied science degree.

2 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; and Creative Arts in the core curriculum.

• RNSG courses must have been taken within the last two years with a passing grade no less than C.

• Course outline is representative of fall semester entry only. Adjustments will be made for spring semester entry.
Admission Information
Applications for entry into the program are accepted each year in the fall and spring. For dates, please see https://www.sanjac.edu/node/1514116.

Earning Potential
Registered Nurse median salary: $77,987 per year


For more information, please contact the following:
281-998-6150 x3315 or adn.transition@sjcd.edu

Campus
South Campus

Transition Program Offered at South Campus effective Fall 2015.

The Associate Degree Nursing (ADN) Transition program is a career transition opportunity designed for license vocation nurses (LVN) and paramedics who desire to continue their education while maintaining employment. It is a program specifically designed to meet the unique learning needs of the LVN and paramedic. The nursing program can be completed in three (3) terms. The ADN transition program is approved by the

Board of Nurse Examiners for the State of Texas
333 Guadalupe #3-460
Austin, Texas 78701

and accredited by the

Accreditation Commission for Nursing (ACEN)
3343 Peachtree Road NE, Suite 850
Atlanta, Georgia 30326
(404) 975-5000.

Applications for the program must meet the requirements for general admission to the College and must also meet program specific requirements. For detailed information concerning admission requirements and deadlines for submitting applications and related documents, contact the department of nursing.

Contact Information:
Email: SJCSouth-ADN@sjcd.edu
Phone: (281) 998-6150 Ext. 3315
Website: www.sanjac.edu/aldn-transition

Admission
Generic Associate Degree Nursing Program Central and North Campuses

A generic student is a novice in health care who generally does not have any formal nursing education. Successful completion of the generic ADN program by these students will qualify graduates to apply for the National Counsel Licensure Examination for Registered Nurse (NCLEX-RN).

Students applying for admission to the generic ADN program must submit the following items:

1. Application for Admission to San Jacinto College via the website at sanjac.edu/apply (provided online).
2. Completion of the Associate Degree Nursing Program Application (provided online) during the application period.
3. Application Periods:
   The ADN program accepts applicants twice a year. Associate degree nursing program applications can be obtained at www.sanjac.edu/ nursings during the following periods:
   Fall Application Period: Feb. 2-April 2
   Spring Application Period: June 1-Aug. 3

Students are strongly encouraged to contact a Counselor or Education Planner in the Educational Planning & Counseling Center to assist the San Jacinto College and ADN Admissions process. Please call 281-998-6150 ext. 1014 or 2317 to schedule an appointment.

4. Selection criteria.

   Students must apply for admission to the Associate Degree Nursing program by submitting an Associate Degree Nursing program application and packet with ALL required official documents at the same time to the ADN office no later than the end of the application period.

   Students who apply for admissions to the Associate Degree Nursing program will be selected on the basis of the highest score on the admissions and scoring rubric. The rubric consists of points given for the grade obtained on the prerequisite courses (see program specific prerequisites below), HESI A2 results, overall GPA and the completed application packet. Meeting minimum admissions requirements does not guarantee program admission.

   All applicants must have completed all college preparatory courses and be “College ready” as recognized by San Jacinto College District. “College ready” is determined as having the following skills levels:
   Reading 7, Writing 7 and Math 9.

5. Code of Conduct

   All students admitted to the ADN program are expected to maintain the highest personal and professional standards of conduct in class
and clinical, in accordance with College policies and procedures, the College Student Handbook, the ADN Department Student Handbook and clinical facility policies and procedures which are used as extended campus sites. Any information indicating that such standards are not adhered to is subject to review by the department chair, and /or members of the nursing department faculty, and may result in a recommendation to the College for dismissal from the program.

6. Official Transcripts must be submitted with the application packet.
   a. Applicants must submit official transcripts from all colleges previously attended, transcripts should be mailed directly to the Central Campus Office of Enrollment Services. Transcripts should be requested as soon as possible. Applicants are encouraged to begin accessing their transcripts early in the application process to ensure that all required documents are available for review. All course work taken outside of the San Jacinto College District is required to be evaluated for transferability of credits towards the ADN degree.
   b. A minimum cumulative GPA of 2.5 is required for all applicants.
   c. Submit all official transcripts sealed from other colleges and San Jacinto College transcripts with ADN application.

7. HESI A2 Admissions Test
Applicants seeking admissions must take an official Nursing Admissions Assessment Exam (HESI A2). A composite score of 75 percent in EACH section of reading comprehension, grammar, vocabulary, anatomy and physiology, and math is required. The learning styles section is required, but will not be used in determining admissions. Submit all HESI A2 admissions test scores with the ADN application packet. Official test scores should be requested as soon as possible. Please visit https://www.sanjac.edu/apply-register/overview/testing/tesi-%E2%80%93-m-information (Testing Center-HESI website) for test dates on Central Campus.

8. A Criminal Background Check and Drug Screen
All applicants are required to complete a criminal background check and drug screen as part of the application/admissions process. According to the Texas Board of Nursing (BON) effective Jan. 1, 1996 a person who has been convicted of a felony that relates to the duties and responsibilities of a licensed registered nurse may be disqualified from obtaining licensure as a licensed registered nurse (213.28 Board of Nurse Examiners for the State of Texas, Rules and Regulations, Sept. 2004). For further inquiry the applicant should directly contact the Texas Board of Nursing. The procedure for completing the criminal background check and drug screen requirements can be found on the ADN website.

9. CPR Card and Immunization documentation must be submitted with the ADN application packet.
In order for an ADN application to be accepted, students must have completed a minimum of:
   a. CPR card from the American Heart Association Health Care Provider (online courses are not accepted)
   b. Varicella Immunization #1, #2 and a positive titer
   c. Hepatitis B series and a positive titer
   d. Hepatitis C titer
   e. Or TWINRIX series completed and a positive titer
   f. Measles, Mumps, and Rubella (MMR) Immunizations #1, #2 and a positive titer
   g. Tdap (Tetanus, Diphtheria and Pertussis) within the last 10 years
   h. Current Flu vaccination
   i. TB Skin Test (within 12 months)
   j. Chest X-Ray (if applicable)

The Texas Administrative Code Rule 97.64 states that enrolled students may not participate in course work activities, including direct patient contact, until full vaccination series have been completed.

Titers for MMR, Varicella, and Hepatitis B are required to be on file in the student’s record prior to the end of the first semester of the ADN program.

10. Health-Physical Examination is required.
Evidence of physical and emotional fitness upon admission and throughout the program is expected and is subject to review by the Associate Degree Nursing department and medical opinions or policy of hospital/agencies which are used as extended campus sites for assigned educational experiences.

A physical examination must be passed prior to entry into the ADN program after a student has been selected and accepted into the program. Physical exams may be scheduled with a private physician/nurse practitioner/physician assistant utilizing the forms issued by the Associate Degree Nursing program upon acceptance. The physical examination must demonstrate that the student is physically and emotionally fit to meet all requirements of direct patient care without any limitations and be free from all communicable diseases.

**Nursing - Associate Degree Nursing Transition Program**

Following are the admission requirements for the Associate Degree Nursing Transition program.

- Licensed Vocational Nurse (LVN) or Paramedic License
- Current and Active CPR card BLS/ACLS from the American Heart Association
- Official transcripts from all institutions
- CPS Report after transcript evaluation is complete
- Copy of HESI A2 scores (limit 2 reports & each section must score 75 or higher)
- Copy of HESI A2 critical thinking report
- Cumulative GPA of 2.5 or higher
- Successful completion of all the required pre-requisite courses with a pre-requisite grade point average (GPA) of 2.5 or higher:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PSYC 2301</td>
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<td>PSYC 2314</td>
<td>Lifespan Growth and Development</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<td>MATH 1314</td>
<td>College Algebra</td>
<td>3</td>
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<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>or BIOL 2401</td>
<td>Human Anatomy and Physiology I (Lab)</td>
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<td>Human Anatomy and Physiology II (Lecture)</td>
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<td>or BIOL 2402</td>
<td>Human Anatomy and Physiology II (Lab)</td>
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<td>BIOL 2320</td>
<td>Microbiology for Health Science Majors (Lecture)</td>
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<tr>
<td>BIOL 2120 or BIOL 2420</td>
<td>Microbiology for Health Science Majors (Lab)</td>
<td>1</td>
</tr>
</tbody>
</table>

  Humanities Elective

   - Immunizations
     - Tetanus (td/tdap) within 10 years
     - Seasonal Flu within 1 year
     - TB (PPD) skin test within 1 year or chest x-ray within 2 years
     - MMR titer that shows immunity
     - Varicella titer that shows immunity
     - Hep B titer that shows immunity

**Additional Links**

Directions to San Jacinto College South / Map of South Campus (https://www.google.com/maps/place/San+Jacinto+College+South/@29.578642,-95.204999,17z/data=!3m1!4b1!4m2!3m1!1s0x0:0x392d12b89cc394b3?hl=en)

List of courses that meet the Humanities requirement for ADN Transition (http://www.sanjac.edu/sites/default/files/Courses%20that%20meet%20the%20Humanities%20 requirement%20for%20ADN%20Transition.pdf)
Applications for Spring will be accepted starting in June 2018. Applications will be accepted in the South Campus Nursing Office located at the South Campus in Building 1 Room 253b (S-1.253b) on Tuesdays, Wednesdays, & Thursdays from 9:00a - 11:00 a.m. & 2:00 - 3:30 p.m.

Please make copies for your records, prior to submitting your application. Unfortunately, the office staff will not be able to make copies of documents or print applications for you.

All required documents for application to the program must be submitted as a complete packet and applications must be typed. We will return incomplete packets and ask that you resubmit prior to the application period deadline. Please check your packet carefully because we are unable to accept incomplete applications. Late applications will not be accepted.

We require official transcripts in a sealed envelope for every college attended, including a San Jacinto College transcript, if attended.

Please note that all applicants must attend an information session for each application period applying. Registration is not required. However, seating and entry is based on a first come first serve basis. In preparation for the information sessions, please bring a pen and paper for note taking. Be on time as late entry will not be granted. All late arrivals will be asked to attend an information session, per schedule, at a later date. If the applicant is late to the last scheduled information session for the application period, the applicant will be asked to apply the following semester.

If an applicant fails to attend an information session for the semester in which they are making application, their application will not be accepted for that semester.

If an applicant has questions, please allow 24-48 hours for a reply.

Phone: 281-998-6150 ext 3315

Email: adn.transition@sjcd.edu

Mandatory Information Sessions for Spring 2019 Application Period
TBD

Texas Board of Nursing
We highly recommend students interested in a nursing career visit the Texas Board of Nursing website. It is an excellent source of information for students looking to obtain a current license in the state of Texas. You may find this information at: http://www.bon.texas.gov/

Student Achievement Data
• First Time Pass Rate on National Council Licensure Exam for Registered Nurses (NCLEX-RN®): **88.33%**
• Students completing the program within 150% of program length: **97.62%**
• Graduates job placement: **94%**

Plan of Study
South Campus
3NUR-LNTRN and 3NUR-PMTRN

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>ENGL 1301</td>
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<td>Lifespan Growth and Development</td>
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<td>RNSG 1105</td>
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<td>RNSG 1115</td>
<td>Health Assessment</td>
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<td>RNSG 1227</td>
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<td>RNSG 1341</td>
<td>Common Concepts of Adult Health</td>
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<td>RNSG 1261</td>
<td>Clinical Nursing Common Concepts for Adult Health</td>
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<td>RNSG 1301</td>
<td>Pharmacology</td>
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<tr>
<td>RNSG 1108</td>
<td>Dosage Calculations for Nursing</td>
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| Total Credits | 27 |

First Term

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<td>RNSG 2260</td>
<td>Clinical Registered Nursing</td>
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<tr>
<td>RNSG 2201</td>
<td>Care of Children and Families</td>
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</tr>
<tr>
<td>RNSG 2262</td>
<td>Clinical Nursing Care of Children and Families</td>
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| Total Credits | 8 |

Second Term

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<tr>
<td>RNSG 2213</td>
<td>Mental Health Nursing</td>
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<td>RNSG 2261</td>
<td>Clinical Mental Health Nursing</td>
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<tr>
<td>RNSG 2271</td>
<td>Concepts of Advanced Nursing Practice and Management</td>
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<tr>
<td>RNSG 2130</td>
<td>Professional Nursing Review and Licensure Preparation</td>
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| Total Credits | 7 |

Third Term

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<tbody>
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</table>

(San Jacinto College 2018-2019)
Career Opportunities
The U.S. Department of Labor is reporting a sharp increase for these jobs, with specific increases in large cities and metropolitan areas.

Graduates can work in:
- Hospitals
- Out-patient facilities
- Nursing homes

Earning Potential
Licensed Vocational Nurse (LVN) median salary / year: $47,212


For more information contact the following:

North Campus
281-998-6150 Ext. 7128 or vn nursingnorth@sjcd.edu

South Campus
281-484-1900 ext. 3592 or vocational.nursing@sjcd.edu

Program Information
If you are a compassionate, take-charge person with a desire to make patients feel comforted in the face of illness, then a career in vocational nursing may be the right career for you. As the population is quickly expanding and aging, the need for quality health care is greater than ever and those who can provide that care are in short supply. A nursing certification from San Jacinto College will change your life and help save the lives of others.

The San Jacinto College vocational nursing curriculum includes:
- a focus on helping students develop as individuals and as responsible citizens who will become a competent practitioner in nursing.
- a combination of class lectures, nursing skills training, and clinical experience in a variety of health care settings.
- an approval by the Texas Higher Education Coordinating Board and the Texas Board of Nursing. Upon successful completion of the program (minimum grade of C in each course), graduates are awarded a Level 2 Certificate, and are eligible to take The National Council Licensure Examination for Practical Nurses (NCLEX-PN® exam). Those students who pass this examination are granted a license by the Texas Board of Nursing to practice as a Licensed Vocational Nurse.

Applicants for the program must meet the requirements for general admission to the College and must also meet program specific requirements. For detailed information concerning admission requirements and deadlines for submitting applications and related documents, contact the department of vocational nursing.

South Campus Contact Information:
Email: vocational.nursing@sjcd.edu
Phone: 281-484-1900 ext. 3504
Website: https://www.sanjac.edu/lvn

North Campus Contact Information:
Email: vn nurs ingnorth@sjcd.edu
Phone: 281-998-6150 ext. 7128
Website: https://www.sanjac.edu/lvn

Texas Board of Nursing
333 Guadalupe
Occupational Therapy Assistant, Associate of Applied Science

Suite 3-460
Austin, Texas 78701-3944

Phone: (512) 305-7400
Fax: (512) 305-7401

Admission Information

Applicants for the program must meet the requirements for general admission to the College and must also meet the following specific requirements:

- Be a high school graduate, GED, or equivalent
- Have a GPA minimum of 2.25 on college-level coursework
- Pass a physical examination and meet specific immunization requirements
- Pass a criminal history check and drug screen

Please note that a person who has been convicted of a felony that relates to the duties and responsibilities of a licensed vocational nurse may be disqualified from obtaining licensure as a licensed vocational nurse. (213.28 Texas Board of Nursing; Rules and Regulations, February 2018). Applicants can address any concerns directly with the Texas Board of Nursing.

Application Dates

Applications for entry into the program are accepted each year in the fall and spring. Periodically, based on need, the North Campus may offer a summer and/or evening sequence of courses. For exact dates, please see www.sanjac.edu/nursing.

Plan of Study

North and South Campuses
5NUR-LVN

The prerequisite for enrolling in the first term is acceptance into the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>VNSG 1420</td>
<td>Anatomy and Physiology for Allied Health</td>
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<tr>
<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>&amp; BIOL 2101</td>
<td>Human Anatomy and Physiology I (Lab)</td>
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<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<tr>
<td>&amp; BIOL 2102</td>
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<tr>
<td>VNSG 1327</td>
<td>Essentials of Medication Administration</td>
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<td>VNSG 1423</td>
<td>Basic Nursing Skills</td>
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<td>VNSG 2431</td>
<td>Advanced Nursing Skills</td>
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<td>VNSG 1260</td>
<td>Clinical I</td>
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Second Term

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<td>VNSG 1429</td>
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<td>VNSG 1331</td>
<td>Pharmacology</td>
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<tr>
<td>HECO 1322</td>
<td>Nutrition and Diet Therapy ¹</td>
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</table>

Capstone Experience: VNSG 2160 Clinical IV - Licensed Practical/Vocational Nursing Training

1 HECO 1322 Nutrition and Diet Therapy is a rotating course.

2 VNSG 1226 Gerontology and VNSG 1162 Clinical III - Practical Nurse will rotate second and third term.

The prerequisite for enrolling in the second and third terms is successful completion of each preceding term with a minimum grade of C in each course.

Occupational Therapy Assistant, Associate of Applied Science

Program Information

Showing compassion and patience are strengths of those who choose occupational therapy for a career. You will assist patients to develop, recover and improve skills for daily living.

As an occupational therapy assistant (OTA), you will work under the direction and supervision of an occupational therapist in a variety of settings and situations from adults recovering from a stroke, to children and young adults with developmental disabilities. Patients and their needs are widely varied and each day holds new, rewarding challenges.

The San Jacinto College occupational therapy assistant program:

- Includes three Level I fieldwork experiences over the span of three semesters in the areas of pediatrics, mental health and physical

San Jacinto College 2018-2019
disabilities. In the final semester, students complete Level II fieldwork which consists of two 8-week rotations in pediatrics or physical disability areas.

- Consists of 60 credit hours; 23 credit hours are prerequisites and 37 credit hours of core courses.
- Upon completion of the program, students will be prepared to test for the National Board of Certification in Occupational Therapy (NBCOT) to become a certified occupational therapy assistant (COTA).

OTAs work in a variety of settings including, but not limited to: hospitals, pediatric clinics, skilled nursing facilities, home health and school systems.

**Career Opportunities**

Employment of occupational therapy assistants is expected to increase 43 percent over the next seven years, according to the Bureau of Labor and Statistics. This adds 14,100 OTA professionals to the field.

According to the 2017 U.S. News Rankings, Occupational Therapy Assistants are ranked No. 1 in Best Health Care Support Jobs and No. 12 in the 100 Best Jobs.

**Earning Potential**

Occupational Therapist Assistant Median Salary: $66,588¹ per year

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information contact 281-998-6150 ext. 3086

**Campus**

South Campus

**Information**

Occupational Therapy Assistants (OTAs) are a vital member of the health care team. The everyday tasks that most of us take for granted - getting dressed or brushing our teeth, for instance - are an OTA's crowning achievements. These health care professionals help patients develop, recover, and improve the skills needed to get back into the routine of daily living and working. OTAs are directly involved in providing therapy to patients and work under the direction of an Occupational Therapist (OT). OTAs work primarily in hospitals, nursing care facilities, in home healthcare, and in schools. OTAs spend much of their time on their feet working with patients and engaging them in everyday activities.

View admission information and application packet here: https://www.sanjac.edu/career/occupational-therapy-assistant

**Plan of Study**

**South Campus**

30CC-THRPy

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<thead>
<tr>
<th>Course Prerequisites</th>
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<th>Credits</th>
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<td>ENGL 1301</td>
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<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
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<td>BIOL 2301 &amp; BIOL 2101</td>
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<td>PSYC 2314</td>
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<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
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<td>OTHA 1309</td>
<td>Human Structure and Function in Occupational Therapy</td>
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<td>OTHA 1315</td>
<td>Therapeutic Use of Occupations or Activities I</td>
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<td>OTHA 1241</td>
<td>Occupational Performance from Birth through Adolescence</td>
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<td>OTHA 2304</td>
<td>Neurology in Occupational Therapy</td>
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<td>Physical Function in Occupational Therapy</td>
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<td>OTHA 1160</td>
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<tr>
<td>OTHA 2209</td>
<td>Mental Health in Occupational Therapy</td>
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<td>OTHA 1319</td>
<td>Therapeutic Interventions I</td>
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<td>OTHA 1253</td>
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<td>OTHA 1161</td>
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<td>OTHA 1249</td>
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<td>OTHA 2302</td>
<td>Therapeutic Use of Occupations or Activities II</td>
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<td>OTHA 2235</td>
<td>Health Care Management in Occupational Therapy</td>
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<td>OTHA 1162</td>
<td>Clinical - Occupational Therapy Assistant</td>
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<tr>
<td>OTHA 2266</td>
<td>Practicum (or Field Experience) - Occupational Therapy Assistant</td>
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<td>OTHA 2267</td>
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**Capstone Experience:** OTHA 2267 Practicum (or Field Experence) - Occupational Therapy Assistant

*Note: Occupational Therapy Assistant students must earn a “C” or higher in all courses in the curriculum. Additionally, students must maintain an overall grade point average of at least 2.0 in order to graduate from the Occupational Therapy Assistant program.*
Pharmacy Technician, Certificate of Technology

Program Information
Have you always been fascinated by medicine and technology? Do you excel in science and math? If so, you can become a vital member of the health care team by pursuing a career as a pharmacy technician.

Career Opportunities
Employment of pharmacy technicians is expected to increase faster than the average for all occupations. This demand will be due to the expansion of retail pharmacies, the increased number of middle-aged and elderly people, and the increasing roles and responsibilities of pharmacy technicians.

Graduates of our program are able to work as pharmacy technicians in:
- Hospitals
- Nursing homes
- Retail
- Home health care
- Public and government health agencies

Earning Potential
Pharmacy Technician median salary: $34,422 per year^1

^1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

Campuses
North Campus
South Campus

For more information, contact the following:
North Campus
281-998-6150 ext. 7348
North.PharmTech@sjcd.edu

South Campus
281-998-6150 ext. 3597
South-PharmTech@sjcd.edu

Information
Pharmacy technicians are a vital member of the health care team. Working under the supervision of the pharmacist, the pharmacy technician performs those tasks associated with the preparation and distribution of medication. Exciting career opportunities include, but are not limited to, positions in hospitals, retail pharmacies, nursing homes, compounding pharmacies, home health care, nuclear pharmacies, insurance companies, and public and government health agencies.

The San Jacinto College's pharmacy technician program is a 12-month certificate program designed to provide applicants with the skills and knowledge to pass the Pharmacy Technician Certification Examination (PTCE) as well as qualify for entry-level positions in a variety of pharmacy settings.

Program Overview
The pharmacy technician program at San Jacinto College is a nationally-accredited program under the guidelines of the American Society of Health-System Pharmacists (ASHP). The program curriculum requires students to complete 32 credit hours that total 864 contact hours which consists of a combination of lecture, on-campus laboratory and clinical training. The emphasis of the program is on training students to work in retail and hospital pharmacies. Upon completion of the program, students are awarded a certificate of technology. After graduation, students register to take the Pharmacy Technician Certification Examination (PTCE). A pharmacy technician must pass the certification examination and register with the Texas State Board of Pharmacy (TSBP) to practice as a certified pharmacy technician (CPhT) in the state of Texas. The program includes two clinical courses. Clinicals are unpaid positions in which students are supervised by the employees at the clinical site. Clinicals are scheduled according to the hours of the site and may vary among day, evening and night shifts. We cannot guarantee any specific site, but every effort will be made to accommodate the student. Students are responsible for their own transportation to and from clinical sites.

Applicants for the program must meet the requirements for general admission to the College and must also meet program specific requirements. For detailed information concerning admission requirements and deadlines for submitting applications and related documents, contact the Pharmacy Technician Department.

View admission procedures and program requirements here: https://www.sanjac.edu/career/pharmacy-technician

Plan of Study
North and South Campuses
4PHAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Term</strong></td>
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</tr>
<tr>
<td>HPRS 1206</td>
<td>Essentials of Medical Terminology</td>
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<td>PHRA 1202</td>
<td>Pharmacy Law</td>
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<td>PHRA 1305</td>
<td>Drug Classification</td>
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<td>PHRA 1309</td>
<td>Pharmaceutical Mathematics I</td>
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<td>PHRA 1313</td>
<td>Community Pharmacy Practice I</td>
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<td><strong>Credits</strong></td>
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| **Second Term**                                             |         |
| PHRA 1441 | Pharmacy Drug Therapy and Treatment                        | 4       |
| PHRA 1347 | Pharmaceutical Mathematics II                             | 3       |
| PHRA 1345 | Compounding Sterile Preparations and Aseptic Technique    | 3       |
| PHRA 1349 | Institutional Pharmacy Practice                            | 3       |
| **Credits**                                                | 13      |
Physical Education Personal Trainer, Certificate of Technology

Program Information
The San Jacinto College personal trainer program utilizes a curriculum that is nationally recognized.

At San Jacinto College, you can depend on classes that get you the results for which you are looking. Our professional instructors have the experience and knowledge needed to teach and motivate students who are seeking a healthy lifestyle and want to help others do the same. Many of those with personal trainer certifications do not have a business plan or adequate skills to work with clients. Our program provides hands-on training and education for students looking to become personal trainers through the study of scientific principles, methodologies and research applied to exercise and fitness. They also gain experience in marketing, health promotion and current business practices from those working in the industry. Upon completion of the program requirements, students earn a certificate of technology credential and are thoroughly prepared to take a nationally recognized personal trainer certification exam.

Program Outcomes
The personal trainer certificate program:

- Builds a strong background in the areas of anatomy, physiology, kinesiology, biomechanics, healthy lifestyle, safety, psychology and health promotion.

- Develops a strong business model through offering information about best practices, professional ethics, marketing, record keeping and communication.

- Prepares students to take any of the nationally-recognized certification exams.

Job Outlook
Projected 13 percent increase in jobs through the year 2022

As baby boomers age, jobs for fitness trainers and instructors are expected to rise in fitness centers.

Obesity in young people and general overall health issues are causing a need for more fitness trainers.

Classes such as yoga and pilates are expected to continue to increase due to older adults wanting relief from stress, arthritis and other health issues.

Business and government are recognizing the benefits for employees to be active, with more incentives being offered to join gyms.

Earning Potential
Personal trainers can earn an average $20.62 / hour

1 www.texaswages.com (http://www.texaswages.com), Gulf Coast region, 2017

Learn From Top-Rated Instructors
We know that you have choices when it comes to personal trainer certification programs, so why choose San Jacinto College? We offer the very best hands-on approach to becoming a personal trainer. We have the latest in industry equipment and our instructors are leaders in their fields. Finding what works for you means that you need a place where you can receive personal instruction in the knowledge and skills to become a successful personal trainer. We are that place!

Do You Have What it Takes to be a Personal Trainer?
Do you have a passion for fitness?

Do you enjoy learning about exercise?

Can you motivate others?

Do you have customer service skills?

Are you a good listener?

Do you have problem solving skills?

Are you a good communicator?

Campus(es)
South Campus

For more information, contact 281-922-3425

Information
The purpose of the personal trainer program is to prepare graduates to work in the field of personal training. Individuals with these credentials
are a vital component in the fitness industry. Graduates of the personal trainer program will have a strong background in the appropriate personal training anatomy and physiology, kinesiology, biomechanics, health and safety and wellness/lifestyle changes areas. They will have industry knowledge in business practices, professional ethics, marketing and proper record keeping.

Plan of Study
South Campus
4PHED-PT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>First Term</td>
<td>FITT 1237 Personal Training</td>
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<td>FITT 2413 Exercise Science</td>
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<td>HPRS 1202 Wellness and Health Promotion</td>
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<td>FITT 2301 Lifestyle Change for Wellness</td>
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<td>Second Term</td>
<td>PHED 1306 First Aid</td>
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<td>FITT 2309 Theory of Exercise Program Design and Instruction</td>
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<td>FITT 1303 Fitness Event Planning and Promotion</td>
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<td>FITT 2471 Kinesiology and Biomechanics</td>
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</table>

Capstone Experience: FITT 2309 Theory of Exercise Program Design and Instruction

Eligible for any nationally recognized personal trainer credentialing exam.

Physical Therapist Assistant, Associate of Applied Science

Program Information
Are you patient, compassionate and persevering? These are the qualities that can help you become a physical therapist assistant (PTA). As a PTA, you will work under the direction and supervision of physical therapists in a variety of settings, providing services for patients which help decrease their pain, improve their mobility, restore function and minimize disabilities.

The San Jacinto College physical therapist assistant program:

- Is a total of 66 credit hours, including three clinical affiliations, and the student is awarded an associate of applied science degree upon completion of the program. Successful completion of the program in two years prepares graduates for the national licensing exam for physical therapist assistants.
- Trains students to help patients to regain strength, range of motion, function and movement.

Additional Information
San Jacinto College boasts a 100 percent pass rate on the national licensing exam in the graduating cohorts from 2009-2016. Graduates have a high employment rate within six months of passing the licensing exam.

The PTA program at San Jacinto College is accredited by the Commission on Accreditation in Physical Therapy Education 1111 North Fairfax St. Alexandria, VA 22314-1488
telephone: (703) 706-3245
e-mail: accreditation@apta.org

Career Opportunities
Employment of physical therapist assistants is expected to increase 30 percent over the next 10 years (BLS.gov, 2016).

Physical therapy assistants work under the supervision of physical therapists in a variety of settings including, but not limited to:

- Acute care
- Hospitals
- Rehab hospitals
- Out-patient clinics
- Aquatics
- Pediatrics
- Geriatrics
- Home health

Earning Potential
Physical Therapist Assistant median salary: $68,323\(^1\) per year

\(^1\) Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, contact 281-922-3476 or email PTAprogram@sjcd.edu.

Campus
South Campus

Information
Physical Therapist Assistants (PTAs) work under the direction and supervision of physical therapists in a variety of settings. Opportunities include, but are not limited to, outpatient clinics, hospitals, long-term care facilities, pediatric centers, schools and home health agencies. PTAs provide services for patients, which help decrease pain, improve mobility, restore function and minimize disabilities.
The physical therapist assistant program at San Jacinto College is accredited by the:

Commission on Accreditation in Physical Therapy Education
1111 North Fairfax St.
Alexandria VA 22314-1488
Telephone: 703-706-3245
Email: accreditation@apta.org
Website: http://www.capteonline.org.

The program is a total of 66 semester credit hours including three clinical rotations. The student is awarded an associate of applied science (A.A.S.) degree upon completion of the program. After graduation, the student applies to take the National Physical Therapist Assistant Examination. Individuals must pass the licensure exam to practice as a PTA in most states, including Texas. The licensure exam is offered by the Executive Council of Physical Therapy and Occupational Therapy Examiners.

Admission

Applicants to the program must meet the requirements for general admission to the College and must also meet program specific requirements. For detailed information concerning admission requirements and deadlines for submitting applications and related documents, contact the department of physical therapy.

Contact Information:

Email: ptaprogram@sjcd.edu
Phone: 281-922-3476
Website: http://www.sanjac.edu/PTA

For more information on the licensing process or for complaints regarding the PTA program or a PTA student contact the:

The American Physical Therapy Association provides information on the profession of physical therapy. www.apta.org

Plan of Study

South Campus
3PH-THRPY

*Sample 2-Year Schedule

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<thead>
<tr>
<th>Course</th>
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<td>BIOL 2301 &amp; BIOL 2101</td>
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First Term

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<td>GTHA 1305</td>
<td>Principles of Occupational Therapy</td>
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<td>PTHA 1313</td>
<td>Functional Anatomy</td>
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PSYC 2301 General Psychology 1 3

Second Term

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<td>PTHA 2409</td>
<td>Therapeutic Exercise</td>
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<td>PTHA 1431</td>
<td>Physical Agents</td>
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<td>Language, Philosophy, and Culture or Creative Arts 2</td>
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CREDITS 13

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<td>PTHA 2205</td>
<td>Neurology</td>
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<td>PTHA 2217</td>
<td>Issues in Health Care</td>
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CREDITS 7

Fourth Term

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<td>Professional Issues</td>
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<tr>
<td>PTHA 2431</td>
<td>Management of Neurological Disorders</td>
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<tr>
<td>PTHA 2435</td>
<td>Rehabilitation Techniques</td>
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CREDITS 10

Fifth Term

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<tr>
<td>PTHA 2461</td>
<td>Clinical III - PTA</td>
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CREDITS 8

Total Credits 66

Capstone Experience: PTHA 2461 Clinical III - PTA

1 Applicants are encouraged to take the required courses identified with (1,2) prior to entering the PTA program.

2 Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, which is published in the San Jacinto Community College web catalog.

Respiratory Care, Associate of Applied Science
Program Information

As a respiratory care practitioner, breathing easy will become your expertise. Passionate practitioners care for a variety of patients, including newborn infants in respiratory distress, children with asthma or pneumonia, adult victims of trauma, and older patients with emphysema or cardiac failure.

The San Jacinto Respiratory Care program:

- Offers a comprehensive curriculum for the preparation of respiratory care practitioners in the field of respiratory therapy, and is accredited by the Commission on Accreditation for Respiratory Care.
- Prepares students for the responsibility of treatment, management, control, diagnostic evaluation and care of patients with deficiencies and abnormalities of the cardiopulmonary system.
- Allows graduates to gain hands-on experience as respiratory care practitioners by administering therapeutic gases, medications, chest therapy, pulmonary function testing, arterial blood gas analysis, hemodynamic monitoring and mechanical ventilation to patients in hospitals in the greater Houston area, including the Texas Medical Center.

Additional Information

Upon completion, students are eligible for admission to the credentialing examination for respiratory therapist offered by the National Board for Respiratory Care (CRT and RRT) and may also apply for a Certificate to Practice from the Texas Department of State Health Services as a Respiratory Care Practitioner.

Career Opportunities

Employment of respiratory therapists is expected to increase faster than the average for all occupations according to the Bureau of Labor Statistics, because of substantial growth of the middle-aged and elderly population.

- Hospitals
- Respiratory therapy clinics
- Nursing homes
- Home health agencies
- Firms that supply respiratory equipment for home use

Earning Potential

Respiratory Therapist median average salary: $49,662 per year


For more information please contact 281-998-6150, ext. 1864.

Campus

Central Campus

Links

Application packet and other important information: www.sanjac.edu/career/respiratory-care

Information

A criminal background check and/or drug screening is required for all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

The Department of Respiratory Care offers an Associate of Applied Science degree program. Graduates are qualified to apply to take the Therapist Multiple-Choice Examination administered by the National Board for Respiratory Care for credentialing.

Due to the limited number of clinical spaces, students are admitted on a competitive basis. All candidates must be counseled by the Department of Respiratory Care at San Jacinto Community College District.

Philosophy

The philosophy of the Department of Respiratory Care adheres to the philosophy of San Jacinto Community College District. Respiratory Care is the allied health discipline, which provides care through the use of diagnostic testing to patients with abnormalities of the cardiopulmonary systems. Respiratory therapists practice their specialty under the direction of licensed physicians and perform their duties in a variety of settings, including intensive care units, neonatal/pediatric special care units, general hospital wards, emergency/trauma units, extended care facilities and the home.

Due to the nature of the services provided, respiratory therapists must be able to apply knowledge gained through academic education to clinical problems and rationally care for the patient. Graduates of the program offered by the Department of Respiratory Care are prepared as contributing members of the health care team.

Objectives

Upon completion of the program offered by the Department of Respiratory Care, the student should be able to:

1. Utilize patient care processes and scientific principles to provide respiratory care to patients in health care facilities.
2. Participate as a contributing member of the health care team.
3. Assume personal responsibility for continued learning in order to maintain professional competency and promote the advancement of the field of respiratory therapy.
4. Successfully complete the credentialing examinations administered by the National Board for Respiratory Care.

Program Admission Criteria

Applicants must meet all College general admission requirements.

Before submitting an application, applicants must complete twelve (12) semester hours as specified below with at least a C average in the courses, and the grade in each of those courses must be a C or better.

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<td>BIOC 2302 &amp; BIOC 2102</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td>3</td>
</tr>
</tbody>
</table>

San Jacinto College 2018-2019
All applicants are required to attend a mandatory information session. The dates and times for the sessions are published on the school’s website at http://www.sanjac.edu/career/respiratory-care

Students must apply for admission to the Respiratory Care Program by submitting a formal application and copies of transcripts to the Respiratory Care Program office. Applicants must also complete a background check at www.CastleBranch.com (http://www.CastleBranch.com) using the package code sy46bg.

Students who apply for admission to the Respiratory Care Program will be ranked based on their scoring on the Respiratory Care Selection Criteria Point System. Meeting the minimum requirements for admission does not guarantee admission.

A student currently on academic probation is ineligible to enroll in the respiratory care program.

Applicants to the respiratory care program will be notified by email regarding their program admission status. Applicants who are not selected for admission to the respiratory care program may re-apply. Applicants who are accepted for admission into the department of respiratory care but who do not enroll must re-apply to be considered for admission at a later date.

After acceptance into the program, all applicants must have a physical examination by a licensed physician, physician’s assistant or nurse practitioner; documentation of updated immunizations; and a drug screening.

Respiratory care students must earn a grade of C or better in all respiratory care (RSPT) courses, science and mathematics courses and must maintain an overall grade point average of at least 2.0 in order to graduate from the respiratory care program. If the student earns a grade of D, W or F in a respiratory care course, the student will be required to repeat the course in which the unsatisfactory grade was earned and pass that course with a grade of C or better in order to progress in the program. A second earned grade of D, W or F in a respiratory care course will result in the student's dismissal from the program. To request re-admission into the program, the student must submit a written petition to the respiratory care admission committee. If re-admission is granted, the student must satisfy the re-admission criteria specified by the Committee in order to continue in the program.

All students should take the required academic foundation courses in sequence along with professional course work.

### Application Periods

- Jan. 1 through June 1
- Sept. 1 through Nov. 1

Classes begin each fall and spring term. For more information please contact the Respiratory Care Department at 281-998-6150, ext. 1864.

### Links

Application packet and other important information: www.sanjac.edu/career/respiratory-care

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### Plan of Study

#### Central Campus

#### Total Credits 66

#### Course Prerequisites

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<tr>
<th>Course</th>
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<td>Human Anatomy and Physiology I (Lecture) and Human Anatomy and Physiology I (Lab)</td>
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<td>Human Anatomy and Physiology II (Lecture) and Human Anatomy and Physiology II (Lab)</td>
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Select one of the following:  

- MATH 1314 College Algebra (or higher)  
- MATH 1332 Contemporary Mathematics (Quantitative Reasoning)  
- MATH 1342 Elementary Statistical Methods (Statistics)

#### Credits

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<tr>
<td>RSPT 1329</td>
<td>Respiratory Care Fundamentals I</td>
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</tr>
<tr>
<td>RSPT 1225</td>
<td>Respiratory Care Sciences</td>
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<tr>
<td>RSPT 1340</td>
<td>Advanced Cardiopulmonary Anatomy and Physiology</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<td>RSPT 1160</td>
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| Credits | 12 |

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<tr>
<td>RSPT 1360</td>
<td>Respiratory Care Clinical I</td>
<td>3</td>
</tr>
<tr>
<td>RSPT 1331</td>
<td>Respiratory Care Fundamentals II</td>
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</tr>
<tr>
<td>RSPT 2310</td>
<td>Cardiopulmonary Disease</td>
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</tr>
<tr>
<td>RSPT 2314</td>
<td>Mechanical Ventilation</td>
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| Credits | 12 |

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<td>Respiratory Care Clinical II</td>
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<tr>
<td>RSPT 2371</td>
<td>Mechanical Ventilation II</td>
<td>3</td>
</tr>
<tr>
<td>RSPT 2217</td>
<td>Respiratory Care Pharmacology</td>
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| Credits | 8 |

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<td>RSPT 2361</td>
<td>Respiratory Care Clinical III</td>
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<tr>
<td>RSPT 2355</td>
<td>Critical Care Monitoring</td>
<td>3</td>
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<tr>
<td>RSPT 2353</td>
<td>Neonatal/Pediatric Cardiopulmonary Care</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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| Credits | 12 |

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<tr>
<th>Fourth Term</th>
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<tbody>
<tr>
<td>RSPT 2362</td>
<td>Respiratory Care Clinical IV</td>
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</tr>
<tr>
<td>RSPT 2130</td>
<td>Respiratory Care Examination Preparation</td>
<td>3</td>
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<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>RSPT 2325</td>
<td>Cardiopulmonary Diagnostics</td>
<td>3</td>
</tr>
</tbody>
</table>

| Credits | 10 |

| Total Credits       | 66 |

---

San Jacinto College 2018-2019
**Capstone Experience:** RSPT 2325 Cardiopulmonary Diagnostics

**Verification of workplace competencies.**

1. Students desiring to obtain a baccalaureate degree should take MATH 1314 College Algebra.

2. Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section of the San Jacinto Community College web catalog.

*Note: Course outline is representative of fall entry only. Adjustments will be made for spring entry. For further information concerning respiratory care accreditation, write or call:

CoARC
1248 Harwood Rd.
Bedford, Texas 76021-4244

817.283.2835 or visit http://www.coarc.com/

---

**Surgical Technology, Associate of Applied Science**

If you are interested in providing hands-on patient care in a fast-paced hospital environment, a degree in surgical technology may be the challenge to kick-start a satisfying medical career. As an integral part of every hospital operating room, surgical technologists are highly valued players with responsibilities that include assisting surgeons, and working with registered nurses, anesthesiologists, and other hospital staff.

The San Jacinto College surgical technology program:

- Offers a curriculum which combines classroom theory with supervised clinical practicum.
- Offers students hands-on operating room experience on how to prepare equipment, surgical supplies and medications, pass instruments to surgeons and assistants, monitor counts, prepare specimens for lab analysis and apply dressing, as well as operate lights, suction machines, and endoscopy equipment.
- Trains students for surgical and post-surgical procedures that meet Universal Standards/Occupational Safety and Health Administration (OSHA) guidelines.

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**Additional Information**

The 12-month certificate program accepts new students in August and January based on the grades earned in the prerequisite courses. Students seeking an associate degree may complete their additional requirements before or after completing the 12-month certificate program.

A criminal background check and drug testing are mandatory along with immunizations, physical, and health care provider cardiopulmonary resuscitation (CPR) training.

The surgical technology program is accredited by the Commission for Accreditation for Allied Health Education Programs (CAAHEP). Upon receiving the certificate of technology, the graduate is eligible to take the National Certification Exam by the National Board of Surgical Technologists and Surgical Assistants. The State of Texas requires all surgical technologists to be certified. Students earning a certificate of technology may work while completing the associate of applied science (A.A.S.) degree.

**Career Opportunities**

Hospitals are the primary employers of surgical technologists.

Private specialty practices such as ophthalmology, neurosurgery, orthopedics and plastic/reconstructive surgery, also hire surgical technologists.

There has been an increase of Surgical Technologists seeking the Certified First Assistant position. With the associate of applied science (A.A.S.) degree and further training, the Licensed Surgical Assistant (LSA) is qualified to work in a specialty position with a surgeon or a group.

**Earning Potential**

Surgical Technologist median salary: $50,655 per year

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**Program Information**

For additional information please contact 281-478-3612.

**Links**

Application packet and information session details: https://www.sanjac.edu/career/surgical-technology

---

**San Jacinto College 2018-2019**
practicum experience at area hospitals. This combination provides the student an opportunity for educational development and skill competency.

The surgical technology program is accredited by the Commission of Accreditation for Allied Health Education Programs (CAAHEP)
25400 U. S. Highway 19 North, Suite 158
Clearwater, Florida 33763

Phone: 727-210-2350
www.caahep.org (http://www.caahep.org), effective until 2024. Upon completion of the program, the student is granted a certificate of technology or associate of applied science, and is eligible to take the National Certification Examination given by the National Board of Surgical Technology and Surgical Assisting.

This is a selective admission program. Class size is determined by the availability of clinical space. Limited enrollment ensures a quality laboratory and clinical experience as needed to become a competent entry-level surgical technologist. To be considered for selection to the Surgical Technology Program, the following steps must be completed:

In order for credit earned in a required biology course to be applicable to the surgical technology program, credit must have been earned within the past five years and the grade earned must have been a C or above. Credit earned in a required biology course exceeds the five-year stipulation if the credit was earned five or more years prior to the first term in which the student enrolls into the program.

1. Be admitted to San Jacinto College. All students must apply Online using the Apply Texas website at www.applytexas.org (http://www.applytexas.org). There is no charge to apply.

2. Provide Official Transcripts
   a. High School Diploma or GED Certificate required
   b. Students with any transfer credits MUST have college transcripts evaluated by San Jacinto College (enrollment services transcript evaluation) prior to submitting an application.
   c. Surgical Technology Department Program Director has final approval of all transferred courses that apply toward the degree in Surgical Technology.
   d. Transcripts from other colleges must be official and sent to:
      i. Office of Enrollment Services
      ii. the Surgical Technology office.

3. Completion of all of the following prerequisite courses, with a minimum grade of "C," before admission to the program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HPRS 1201</td>
<td>Introduction to Health Professions (Surgical Technology)</td>
<td>2</td>
</tr>
</tbody>
</table>

4. Attend a mandatory information meeting as posted on the San Jacinto College website.

5. Complete and submit a Surgical Technology application by the deadlines of June 1 or October 15.

Program Admission Criteria

The surgical technology program accepts applicants twice a year. Application periods are April 1 through June 1, for fall admission; and September 1 through October 15 for spring admission. Students must apply for admission to the department of surgical technology by submitting a formal application to the department, and by submitting all required official documents to the Office of Enrollment Services.

Surgical Technology

Students who apply for admission will be selected based on their completion of the prerequisite coursework and their total score on the application rubric. Applicants must complete prerequisite courses with the grade of C or better in each course. Meeting minimal entry requirements does not guarantee program admission. Students must attend a Mandatory Information Meeting prior to submission of their application, as posted on the San Jacinto College website.

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After acceptance into the program, an applicant must have a physical examination by a licensed physician, physician’s assistant or nurse practitioner; must submit documentation of updated immunizations; and all documents must be submitted to Castle Branch, along with a specified fee. A criminal background check and drug screening are required for all health science students attending clinical courses, and are required prior to admission to the surgical technology program.

Student Progression

Surgical technology students must earn a grade of C or above in all surgical technology courses and maintain an overall cumulative grade point average of at least 2.0 in order to graduate from the surgical technology program. In subsequent terms, should a second grade of D, W or F be earned in any surgical technology course, even though the student may have repeated the course in which the first grade of D, W or F was earned and received, the student will be dismissed from the surgical technology program. A student may appeal their dismissal with the Surgical Technology Appeals Committee.

Students are required to purchase uniforms and accessories specified by the Department of Surgical Technology. Each student is responsible for his/her own transportation to the clinical areas. Each student who registers for surgical technology courses is required to purchase student liability insurance.

Plan of Study

Central Campus
### Course Prerequisites

Select one of the following:

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SCIT 1307</td>
<td>Applied Human Anatomy and Physiology I</td>
<td>3</td>
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<tr>
<td>BIOL 2404</td>
<td>Introduction to Anatomy and Physiology</td>
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<td></td>
<td>(lecture &amp; lab)</td>
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<tr>
<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>&amp; BIOL 2101</td>
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<td>&amp; BIOL 2302</td>
<td>and Human Anatomy and Physiology II (Lecture)</td>
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<td>&amp; BIOL 2101</td>
<td>and Human Anatomy and Physiology II (Lab)</td>
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<td>HPRS 1206</td>
<td>Essentials of Medical Terminology</td>
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<tr>
<td>HPRS 1201</td>
<td>Introduction to Health Professions</td>
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**First Term**

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<tr>
<td>SRGT 1260</td>
<td>Clinical I Surgical</td>
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<tr>
<td>SRGT 1505</td>
<td>Fundamentals of Perioperative Concepts and Techniques</td>
<td>5</td>
</tr>
<tr>
<td>SRGT 1505</td>
<td>Introduction to Surgical Technology</td>
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<tr>
<td>SRGT 1360</td>
<td>Clinical II Surgical</td>
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<td>SRGT 1541</td>
<td>Surgical Procedures I</td>
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<tr>
<td>HPRS 2301</td>
<td>Pathophysiology or Microbiology for Health</td>
<td>3</td>
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<tr>
<td>or BIOL 2320</td>
<td>Science Majors (Lecture) and Microbiology</td>
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<td>and BIOL 2120</td>
<td>for Health Science Majors (Lab)</td>
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<td>HPRS 2200</td>
<td>Pharmacology for Health Professions</td>
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<td>SRGT 2130</td>
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<td>ENGL 1301</td>
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<td>Reasoning) (or higher)</td>
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<td></td>
<td>or College Algebra</td>
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<tr>
<td>ENGL 2311</td>
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<td>or Composition II</td>
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<td>PSYC 2301</td>
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<td>Language, Philosophy, and Culture or Creative Arts</td>
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**Credits**

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**Total Credits**

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**Capstone Experience:** SRGT 1542 Surgical Procedures II and SRGT 2460 Clinical III Surgical

**Verification of workplace competencies.**

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### Program Information

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**Earning Potential**

Surgical Technologist median salary: $50,655 per year


For additional information please contact 281-478-3612.

**Campus**

Central Campus

**Links**

Application packet and information session details: https://www.sanjac.edu/career/surgical-technology

**Information**

Surgical technologists are an integral part of the surgical team, and work closely with nurses and surgeons to provide the best possible care for the patient during the intraoperative phase of a surgical procedure. Surgical technologists are responsible for assisting during surgery by passing instruments and other equipment to the surgeon in a prescribed manner, and maintaining sterility throughout the surgical procedure.

The goal of the Department of Surgical Technology is to provide students with the opportunity to develop the skills and knowledge necessary to gain employment as entry-level surgical technologists, and to become contributing members of the health care team. The program curriculum is a balance of theoretical and technical courses, with supervised clinical/practicum experience at area hospitals. This combination provides the student an opportunity for educational development and skill competency.

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Commission of Accreditation for Allied Health Education Programs (CAAHEP)

25400 U. S. Highway 19 North, Suite 158

Clearwater, Florida 33763

Phone: 727-210-2350

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<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture) &amp; Human Anatomy and Physiology I (Lab)</td>
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<tr>
<td>or BIOL 240</td>
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<td></td>
</tr>
<tr>
<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture) &amp; Human Anatomy and Physiology II (Lab)</td>
<td></td>
</tr>
<tr>
<td>or BIOL 2402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPRS 1206</td>
<td>Essentials of Medical Terminology</td>
<td>2</td>
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<td>HPRS 1201</td>
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</table>

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**Plan of Study**

**Central Campus**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<tr>
<td>HPRS 1201</td>
<td>Introduction to Health Professions (Surgical Technology)</td>
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<tr>
<td>HPRS 1206</td>
<td>Essentials of Medical Terminology</td>
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**First Term**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRGT 1260</td>
<td>Clinical I Surgical</td>
<td>2</td>
</tr>
<tr>
<td>SRGT 1509</td>
<td>Fundamentals of Perioperative Concepts and Techniques</td>
<td>5</td>
</tr>
<tr>
<td>SRGT 1505</td>
<td>Introduction to Surgical Technology</td>
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**Second Term**

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<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>HPRS 2301</td>
<td>Pathophysiology</td>
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<tr>
<td>BIOL 2420 or BIOL 2320</td>
<td>or Microbiology for Health Science Majors (Lecture) and Microbiology for Health Science Majors (Lab)</td>
<td>3</td>
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<tr>
<td>HPRS 2200</td>
<td>Pharmacology for Health Professions</td>
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**Third Term**

<table>
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<td>SRGT 1542</td>
<td>Surgical Procedures II</td>
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<tr>
<td>SRGT 2130</td>
<td>Professional Readiness</td>
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**Capstone Experience:** SRGT 1542 Surgical Procedures II and SRGT 2460 Clinical III Surgical

Upon completion of the program the student receives a certificate of technology and is eligible to write the National Certification Examination to become a certified surgical technologist.
**PUBLIC SAFETY AND HUMAN/CONSUMER SERVICES**

- Cosmetology High School Operator Dual Credit, Certificate of Technology
- Cosmetology Instructor, Associate of Applied Science
- Cosmetology Instructor, Certificate of Technology
- Cosmetology Operator, Associate of Applied Science
- Cosmetology Operator, Certificate of Technology
- Cosmetology, Facial Specialist (Esthetician), Certificate of Technology
- Cosmetology, Nail Technician, Occupational Certificate
- Criminal Justice Core, Occupational Certificate
- Criminal Justice, Associate of Applied Science
- Criminal Justice, Certificate of Technology
- Criminal Justice, Level 2 Certificate of Technology
- Culinary Arts - Chef Training/Restaurant Management, Occupational Certificate
- Culinary Arts - Pastry Chef Specialty, Associate of Applied Science
- Culinary Arts - Pastry Chef Specialty, Certificate of Technology
- Culinary Arts, Associate of Applied Science
- Culinary Arts, Certificate of Technology
- Culinary Arts, Restaurant Management, Associate of Applied Science
- Culinary Restaurant Management, Certificate of Technology
- Fire Protection, Chief Officer, Enhanced Skills Certificate
- Firefighting, Associate of Applied Science
- Firefighting, Certificate of Technology
- Massage Therapy, Occupational Certificate
- Restaurant Management

---

**Cosmetology High School Operator Dual Credit, Certificate of Technology**

**Program Information**

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A career in cosmetology gives you this kind of satisfaction. There is no better way to enter the field than at San Jacinto College. Our programs give you the training you need to become licensed by the state as a hair designer, facial specialist, nail technician, hair weaving and braiding specialist, eye lash extension specialist, or cosmetology instructor. Look around the city and you will see that there is no shortage of businesses offering these services, and new ones open almost daily. You could work anywhere from neighborhood salons to high-end day spas, or follow your dream to open your own business.

The San Jacinto College cosmetology program:

- Is designed to prepare students with the technical skills and theoretical knowledge required for an entry-level position in the cosmetology operator profession;
- Offers students the opportunity to complete the 1,500 hours of required training to be eligible to take the Texas Department of Licensing and Regulation Cosmetology Operator examination; and
- Prepares students to be hairdressers, hair weavers, salon operators, aestheticians, manicurists, eye lash specialists, and more.

**Career Opportunities**

Students completing a San Jacinto College cosmetology program may pursue careers as:

- Hairdressers
- Color Specialists
- Manicurists
- Make-Up Artists
- Aestheticians

**Earning Potential**

Hairdressers, hairstylists, and cosmetologists median salary: $25,056 per year¹

¹ Source: texascaresonline.com (http://texascaresonline.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.
The cosmetology high school operator dual credit certificate of technology program is a course of study designed to meet the needs of high school students who desire to enter the beauty industry in a minimum of time. The program will provide the student with the technical background and experience necessary to develop the skills and theoretical knowledge required to pass the Texas Department of Licensing and Regulations Examination for licensing and to gain entry-level employment in professional salons. Part-time students can complete the certificate of technology in two years. All key aspects of the cosmetology profession are addressed.

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):
https://www.tdlr.texas.gov/cosmet/cosmet.htm

Plan of Study

All Campuses
4COSM-OPHS

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td><strong>First Term</strong></td>
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</tr>
<tr>
<td>CSME 1310</td>
<td>Introduction to Haircutting and Related Theory</td>
<td>3</td>
</tr>
<tr>
<td>CSME 1505</td>
<td>Fundamentals of Cosmetology</td>
<td>5</td>
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<td></td>
<td><strong>Credits</strong></td>
<td><strong>8</strong></td>
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<td><strong>Second Term</strong></td>
<td></td>
<td></td>
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<tr>
<td>CSME 1553</td>
<td>Chemical Reformation and Related Theory</td>
<td>5</td>
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<tr>
<td>CSME 1354</td>
<td>Artistry of Hair Design I</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>CSME 1355</td>
<td>Artistry of Hair Design II</td>
<td>3</td>
</tr>
<tr>
<td>CSME 2501</td>
<td>Principles of Hair Coloring and Related Theory</td>
<td>5</td>
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<td></td>
<td><strong>Credits</strong></td>
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<td><strong>Fourth Term</strong></td>
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<tr>
<td>CSME 2310</td>
<td>Advanced Haircutting and Related Theory</td>
<td>3</td>
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<td>CSME 2350</td>
<td>Preparation for the State Licensing Written Examination</td>
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<td>CSME 2251</td>
<td>Preparation for the State Licensing Practical Examination</td>
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Verification of workplace competencies; Eligible for the credentialing exam – Texas Department of Licensing and Regulation Cosmetology Operator Licensure Examination

Cosmetology Instructor, Associate of Applied Science

Program Information

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A life in cosmetology gives you this kind of satisfaction, but have you ever wanted to inspire others? Our program for cosmetology instructors can give you the training you need to become a professional instructor allowing you to prepare for a career in teaching students pursuing careers in cosmetology. The instructor's program prepares students for job opportunities in high schools, higher education, and private institutions as well rounded instructors.

The San Jacinto College cosmetology instructor program:

- Is designed for licensed cosmetologists, manicurists, or facialists who have acquired salon experience and are looking to teach cosmetology;
- Prepares students for professional positions as cosmetology instructors; and
- Prepares students to be eligible for the state credentialing exam, the Texas Department of Licensing and Regulation Cosmetology Instructor License Examination.

Career Opportunities

Students completing a San Jacinto cosmetology instructor program will qualify to teach in the cosmetology industry with an emphasis on instructional presentations and clinic management.

Earning Potential

Vocational Education Teachers in Secondary Schools: $54,802 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

Campuses

Central Campus
North Campus

San Jacinto College 2018-2019
Information
This program is designed to provide classroom management and instructional training for licensed cosmetologists, manicurists, or facialists who already possess skills in their respective fields. This program will train students for professional positions as cosmetology instructors in the private and public sectors of education.

To enroll in the cosmetology instructor courses listed below, the student must be 18 years of age, have a valid Texas Department of Licensing and Regulation license and provide evidence of a high school diploma or GED equivalent. Two years work experience is preferred.

Admission
For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):
https://www.tdlr.texas.gov/cosmet/cosmet.htm

Plan of Study
All Campuses
3COSM-INST

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>CSME 1435</td>
<td>Orientation to the Instruction of Cosmetology</td>
<td>4</td>
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<tr>
<td>CSME 1534</td>
<td>Cosmetology Instructor I</td>
<td>5</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>Speech</td>
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<td>BUSG 2309</td>
<td>Small Business Management</td>
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<td><strong>Second Term</strong></td>
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<td>CSME 2414</td>
<td>Cosmetology Instructor II</td>
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<td>CSME 2549</td>
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<td>HRPO 1311</td>
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<td>ENGL 1302</td>
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<td>or ENGL 2311</td>
<td>or Technical and Business Writing</td>
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<td><strong>Third Term</strong></td>
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<tr>
<td>CSME 2445</td>
<td>Instructional Theory and Clinic Operation</td>
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<td>Cosmetology Instructor IV</td>
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<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<tr>
<td>or BCIS 1305</td>
<td>or Business Computer Applications</td>
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<td><strong>Fourth Term</strong></td>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
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<tr>
<td>or MATH 1314</td>
<td>or College Algebra</td>
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Total Credits: 60

1 Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Sciences in the core curriculum.

Verification of workplace competencies: Eligible for the credentialing exam – Texas Department of Licensing and Regulation Cosmetology Instructor License Examination

Approved Electives
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<td>CSME 1308</td>
<td>Principles of Eyelash Extensions</td>
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<td>CSME 1330</td>
<td>Orientation to Nail Technology</td>
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<td>CSME 1409</td>
<td>Application of Eyelash Extensions</td>
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<td>CSME 1421</td>
<td>Principles of Facial and Skin Care Technology</td>
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<td>CSME 1457</td>
<td>Applications of Hair-Weaving and Braiding</td>
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<td>CSME 1507</td>
<td>Orientation to Eyelash Extensions</td>
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<td>CSME 1520</td>
<td>Orientation to Facial Specialist</td>
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<td>CSME 1531</td>
<td>Principles of Nail Technology I</td>
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<td>CSME 1541</td>
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<td>Principles of Facial and Skin Care Technology II</td>
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<tr>
<td>CSME 1552</td>
<td>Orientation to Hair-Weaving and Braiding</td>
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<tr>
<td>CSME 2430</td>
<td>Nail Enhancement</td>
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<tr>
<td>CSME 2431</td>
<td>Principles of Facial and Skin Care Technology III</td>
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</table>

Cosmetology Instructor, Certificate of Technology

Program Information
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Cosmetology Instructor, Occupational Certificate prepares students for job opportunities in high schools, higher education, and private institutions as well rounded instructors.

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Earning Potential

Vocational Education Teachers in Secondary Schools: $54,802 per year

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Campuses

Central Campus
North Campus
South Campus

Information

The cosmetology instructor certificate of technology program is designed to meet the needs of those students who desire to enter the world of education in a minimum amount of time. This program will provide the student with the training necessary to provide proper instruction in varied classroom situations. Emphasis will be on classroom management, curriculum development, evaluation methods and the use of media in the classroom.

Before registering for the cosmetology instructor courses listed below, the student must have a valid Texas Department of Licensing and Regulation License and must provide evidence of a high school diploma or GED equivalent. It is preferred that students have two years of work experience.

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

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Plan of Study

All Campuses

4COSM-INST

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>First Term</td>
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<td>CSME 1534</td>
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<tr>
<td>CSME 2445</td>
<td>Instructional Theory and Clinic Operation</td>
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<td>CSME 2544</td>
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</table>

Total Credits 27

Verification of workplace competencies: Eligible for the Texas Cosmetology Commission Instructor Licensure Exam Program

Cosmetology Instructor, Occupational Certificate

Program Information

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A life in cosmetology gives you this kind of satisfaction, but have you ever wanted to inspire others? Our program for cosmetology instructors can give you the training you need to become a professional instructor allowing you to prepare for a career in teaching students pursuing careers in cosmetology. The instructor's program prepares students for job opportunities in high schools, higher education, and private institutions as well rounded instructors.

The San Jacinto College cosmetology instructor program:

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Prepares students to be eligible for the state credentialing exam, the Texas Department of Licensing and Regulation Cosmetology Instructor License Examination.

Career Opportunities

Students completing a San Jacinto cosmetology instructor program will qualify to teach in the cosmetology industry with an emphasis on instructional presentations and clinic management.

Earning Potential

Vocational Education Teachers in Secondary Schools: $54,802 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

Campuses

Central Campus
North Campus
South Campus

Information

The cosmetology instructor occupational certificate program is the fast track to enter the world of education. The program will provide the student with the training necessary to provide innovative classroom management, curriculum development and preparation for the Texas Department of Licensing and Regulation (TDLR) Cosmetology Instructor licensure exam.

Before registering for the cosmetology instructor courses listed below, the student must have a valid Texas Department of Licensing and Regulation Cosmetology Operator License and must provide evidence of a high school diploma or GED equivalent. Two years of cosmetology work experience or department chair approval.

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):

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Plan of Study

South Campus
6COSM-INST

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<tr>
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<td>Orientation to the Instruction of Cosmetology</td>
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</table>

Capstone Experience: CSME 2544 Cosmetology Instructor IV

Verification of Workplace Competencies: Eligible for the Credentialing Exam – Texas Department of Licensing and Regulation Cosmetology Instructor License Examination.

Program Information

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A career in cosmetology gives you this kind of satisfaction. There is no better way to enter the field than at San Jacinto College. Our programs give you the training you need to become licensed by the state as a hair designer, facial specialist, nail technician, hair weaving and braiding specialist, eye lash extension specialist, or cosmetology instructor. Look around the city and you will see that there is no shortage of businesses offering these services, and new ones open almost daily. You could work anywhere from neighborhood salons to high-end day spas, or follow your dream to open your own business.

The San Jacinto College cosmetology program:

- Is designed to prepare students with the technical skills and theoretical knowledge required for an entry-level position in the cosmetology operator profession;
- Offers students the opportunity to complete the 1,500 hours of required training to be eligible to take the Texas Department of Licensing and Regulation Cosmetology Operator examination; and
- Prepares students to be hairdressers, hair weavers, salon operators, aestheticians, manicurists, eye lash specialists, and more.

Career Opportunities

Students completing a San Jacinto College cosmetology program may pursue careers as:

- Hairdressers
- Color Specialists
- Manicurists
Earning Potential

Hairdressers, hairstylists, and cosmetologists median salary: $25,056 per year

1 Source: texascaresonline.com (http://texascaresonline.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

Campuses

Central Campus
North Campus
South Campus

Information

The cosmetology operator curriculum is designed to provide the student with basic knowledge and skills required to pass the Texas Department of Licensing and Regulations Examination for licensing and for entry-level employment in professional salons. Emphasis is placed on using these skills and knowledge in a simulated salon. All key aspects of the beauty profession are addressed.

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):

https://www.tdlr.texas.gov/cosmet/cosmet.htm

Plan of Study

All Campuses
3COSM-OP

<table>
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<td>CSME 1310</td>
<td>Introduction to Haircutting and Related Theory</td>
<td>3</td>
</tr>
<tr>
<td>CSME 1354</td>
<td>Artistry of Hair Design I</td>
<td>3</td>
</tr>
<tr>
<td>CSME 1501</td>
<td>Orientation to Cosmetology or Fundamentals of Cosmetology</td>
<td>5</td>
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<td>CSME 1553</td>
<td>Chemical Reformation and Related Theory</td>
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<td>CSME 1248</td>
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<td>CSME 1355</td>
<td>Artistry of Hair Design II</td>
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<td>Advanced Haircutting and Related Theory</td>
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<tr>
<td>CSME 2350</td>
<td>Preparation for the State Licensing Written Examination</td>
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Summer Year One Term

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Fourth Term

<table>
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<tr>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) or College Algebra</td>
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<tr>
<td>Speech</td>
<td>Language, Philosophy, and Culture or Creative Arts 1</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences 1</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>Credits</td>
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</tr>
</tbody>
</table>

Total Credits 60

1 Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of "The Basics" Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

Verification of Workplace Competencies; Eligible for the credentialing exam – Texas Department of Licensing and Regulation Cosmetology Operator Examination

Cosmetology Operator, Certificate of Technology

Program Information

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A career in cosmetology gives you this kind of satisfaction. There is no better way to enter the field than at San Jacinto College. Our programs give you the training you need to become licensed by the state as a hair designer, facial specialist, nail technician, hair weaving and braiding specialist, eyelash extension specialist, or cosmetology instructor. Look around the city and you will see that there
is no shortage of businesses offering these services, and new ones open almost daily. You could work anywhere from neighborhood salons to high-end day spas, or follow your dream to open your own business.

The San Jacinto College cosmetology program:

- Is designed to prepare students with the technical skills and theoretical knowledge required for an entry-level position in the cosmetology operator profession;
- Offers students the opportunity to complete the 1,500 hours of required training to be eligible to take the Texas Department of Licensing and Regulation Cosmetology Operator examination; and
- Prepares students to be hairdressers, hair weavers, salon operators, aestheticians, manicurists, eye lash specialists, and more.

**Career Opportunities**

Students completing a San Jacinto College cosmetology program may pursue careers as:

- Hairdressers
- Color Specialists
- Manicurists
- Make-Up Artists
- Aestheticians

**Earning Potential**

Hairdressers, hairstylists, and cosmetologists median salary: $25,056 per year¹

¹ Source: texascaresonline.com (http://texascaresonline.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

**Campuses**

Central Campus
North Campus
South Campus

**Information**

The Cosmetology Operator Certificate of Technology is a course of study designed to meet the needs of those students who desire to enter the beauty industry in a minimum amount of time. The program will provide the student with the technical background and experience necessary to develop the skills and theoretical knowledge required to pass the Texas Department of Licensing and Regulations Examination for licensing and to gain entry-level employment in professional salons. Full-time students can earn the certificate of technology in one year. All key aspects of the cosmetology profession are addressed.

**Admission**

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

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For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):

https://www.tdlr.texas.gov/cosmet/cosmet.htm

**Plan of Study**

All Campuses
4COSM-OP

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
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<tr>
<td>CSME 1310</td>
<td>Introduction to Haircutting and Related Theory</td>
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</tr>
<tr>
<td>CSME 1354</td>
<td>Artistry of Hair Design I</td>
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<tr>
<td>CSME 1501 or CSME 1505</td>
<td>Orientation to Cosmetology or Fundamentals of Cosmetology</td>
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<tr>
<td>CSME 1553</td>
<td>Chemical Reformation and Related Theory</td>
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| Second Term |
| CSME 1248 | Principles of Skin Care                       | 2       |
| CSME 2310 | Advanced Haircutting and Related Theory       | 3       |
| CSME 2501 | Principles of Hair Coloring and Related Theory | 5       |
| CSME 2350 | Preparation for the State Licensing Written Examination | 3       |
| CSME 1355 or CSME 2337 | Artistry of Hair Design II or Advanced Cosmetology Techniques | 3       |
| Credits  |                                              | 16      |

| Third Term |
| CSME 2251 | Preparation for the State Licensing Practical Examination | 2       |
| CSME 2343 | Salon Development                                | 3       |
| CSME 2539 | Advanced Hair Design                             | 5       |
| Credits  |                                              | 10      |

Total Credits 42

Verification of Workplace Competencies: Eligible for the credentialing exam – Texas Department of Licensing and Regulation Cosmetology Operator Examination

**Cosmetology, Facial Specialist (Esthetician), Certificate of Technology**
Program Information

The San Jacinto College facial/esthetic specialist certificate program provides students with the skills and knowledge necessary for an entry-level position in the facial/esthetics profession. This high-demand career is fueled by individuals who want to help others improve the health of their skin through better skin-care practices.

Upon successful completion of 750 classroom and lab training hours, the student is eligible to take the written and practical exams regulated by the Texas Department of Licensing and Regulations in Facial/Esthetics.

Program topics include:

• History of esthetics
• Infection control practices
• Anatomy and physiology of the skin
• Disorders and diseases of the skin
• In-depth skin analysis
• Skin care ingredients
• Facial massage techniques
• Use of facial machines
• Hair removal methods
• Makeup techniques
• Retailing services and products
• New technology

Career Opportunities

Students who earn the facial/esthetic specialist certificate may pursue careers in:

• Spas/Salons
• Resorts/Hotels
• Medical practices
• Makeup artistry
• Self-employment

Earning Potential

Skincare Specialist median salary - $30,080

1 Source: U.S. Bureau of Labor Statistics Nationwide Average Median Wages, 2017

For more information, please contact North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

Plan of Study

North and South Campuses

4COSM-FAC

<table>
<thead>
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<td>CSME 1421</td>
<td>Principles of Facial and Skin Care Technology I</td>
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<td>CSME 1302</td>
<td>Applications of Facial and Skin Care Technology I</td>
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<td>Second Term</td>
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<tr>
<td>CSME 1545</td>
<td>Principles of Facial and Skin Care Technology II</td>
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<td>CSME 2431</td>
<td>Principles of Facial and Skin Care Technology III</td>
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<td>CSME 2333</td>
<td>Application of Facial and Skin Care Technology II</td>
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</table>

Verification of workplace competencies: Eligible for the credentialing exam – Texas Department of Licensing and Regulation Esthetician/Facial Specialist Licensure Examination

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):

https://www.tdlr.texas.gov/cosmet/cosmet.htm

Campuses

North Campus
South Campus

Information

The Facial Specialist (Esthetician) Certificate of Technology is designed to prepare the student with the skills and knowledge required for an entry level position in the facial/esthetics profession. Students must pass all six (6) courses to be eligible to take the Texas Department of Licensing and Regulation Esthetician (Facial) License Examination for licensure.
Program Information

Helping other people look and feel their best is one of the most fulfilling career paths you can take. A life in cosmetology gives you this kind of satisfaction. There is no better way to enter the field than at San Jacinto College. Our specialty programs can give you the training you need to become licensed by the state as a hair designer, facial specialist, nail technician, or massage therapist.

Look around the city and you will see that there is no shortage of businesses offering these services, and there are new ones opening almost daily. You could work anywhere, from neighborhood salons to high-end day spas, or follow your dream to open your own business.

The San Jacinto College Cosmetology Specialty Programs include:

- Facial certificate of technology: designed to prepare students with the skills and knowledge required for an entry-level position in the facial/esthetics profession. Upon successful completion of 750 hours, the student is eligible to take the Texas Department of Licensing and Regulation for Facial/Esthetics.
- Nail technician occupational certificate program: designed to provide the student with the basic manicuring skills and knowledge required to pass the Texas Department of Licensing and Regulation Examination for licensing and to gain entry-level employment in a professional salon spa. Emphasis is on the application of all learned skills and theoretical knowledge in a simulated salon. All key aspects of the nail profession are addressed, including acrylic, fiberglass, and gel nail extensions.

Career Opportunities

Students completing a San Jacinto Cosmetology Specialty program may pursue careers as:

- Color Specialists
- Manicurists
- Make-Up Artists
- Aestheticians
- Nail Technicians

Earning Potential

Skin Care Specialists median salary: $19,058 per year

Hairdressers, Hairstylists, and Cosmetologists median salary: $25,056 per year

Manicurists and Pedicurists median salary: $20,699 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-991-2608; North Campus, 281-998-6150 ext. 7201; or South Campus, 281-998-6150 ext. 3587.

Campuses

Central Campus
North Campus
South Campus

Information

The nail technician occupational certificate program is designed to provide the student with the basic manicuring skills and knowledge required to pass the Texas Department of Licensing and Regulation Examination for licensing and to gain entry-level employment in a professional salon. Emphasis is on the application of all learned skills and theoretical knowledge in a simulated salon. All key aspects of the nail profession are addressed.

Admission

For students in this program who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or department chair.

For more information about requirements, visit the Texas Department of Licensing and Regulation (TDLR):

https://www.tdlr.texas.gov/cosmet/cosmet.htm

Plan of Study

Central Campus
6COSM-NAI

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<td>CSME 1531</td>
<td>Principles of Nail Technology I</td>
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<tr>
<td>CSME 1541</td>
<td>Principles of Nail Technology II</td>
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<tr>
<td>CSME 2430</td>
<td>Nail Enhancement</td>
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<tr>
<td></td>
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</table>

Verification of Workplace Competencies: Eligible for the Credentialing Exam — Texas Department of Licensing and Regulation Manicurist License Examination

Criminal Justice Core, Occupational Certificate

Program Information

Do you desire to make the world a better and safer place? Do you believe in justice and protection? If so, studying criminal justice at San Jacinto College is an excellent place to begin.

Our program prepares you for a variety of exciting and meaningful careers—law enforcement, emergency management, homeland security,
corrections, probation, parole, and even social work. We offer a degree plan that prepares you for a career in criminal justice—one of the most popular, fascinating, and fastest growing fields. Choose this path, and you will be serving society with a chance to make the world a better place.

The San Jacinto College criminal justice program:
- Offers students a career that gives back to their community. When you study criminal justice at San Jacinto College, you are supporting safety as you train to serve as a professional in the criminal justice field;
- Prepares students to specialize in studies for their long-term goals that can lead to rewarding careers in social work, the FBI, pre-law, homeland security, and emergency management; and
- Is best for those individuals who want to pursue a challenging career in a criminal justice profession. Criminal justice is today's new liberal arts degree.

Additional Information

The Associate of Applied Science (AAS) degree offers the educational foundation needed in policing, social work, corrections, probation and parole. In addition, there are certificates that focus on educational direction and are centered around professional fields.

Upon proof of completion of a basic academy by having successfully passed the state's licensing exam, San Jacinto College will articulate 18.0 WECM semester hours upon completion of six hours of criminal justice courses in residency at San Jacinto College for working police officers based upon proof of having successfully passed the state's licensing exam. San Jacinto College exempts licensed Texas peace officers, who are employed as full-time officers, from tuition on criminal justice courses.

Career Opportunities

- Police Officers
- Parole Officers
- Probation Officers
- Adult Protective Service Officers
- Child Protective Service Officers
- Social Workers
- Pre-law
- Emergency Management
- Homeland Security
- FBI

Earning Potential

Brazoria County Sheriff's Office dispatcher: $16.06 per hour
Brazoria County Sheriff's Office detention deputy: $18.05 per hour
Harris County detention officer: $35,071 to $50,132 per year
Pasadena Police Department patrol officer starting salary: $55,680 per year
Rosenberg Police Department police officer starting salary: $24.55 - $29.45 per hour
Webster Police Department police officer cadet starting salary: $22.08 per hour ($45,926 per year)
Webster Police Department police officer starting salary: $24.28 per hour ($50,519 per year) and $24.89 per hour ($51,781 per year) after six months probationary period.

1 Source: www.brazoria-county.com (http://www.brazoria-county.com), 2017
3 Source: www.ppdcareer.com (http://www.ppdcareer.com), 2017
4 Source: www.rosenbergpolice.com (http://www.rosenbergpolice.com), 2017
5 Source: www.cityofwebster.com (http://www.cityofwebster.com), 2017

For more information, please contact Central Campus, 281-476-1873; or North Campus, 281-998-6150 ext. 7343.

Campuses

Central Campus
North Campus

Information

Criminal justice is an interdisciplinary program with enough flexibility to permit students to pursue diverse interest within the system. For example, an associate of arts (A.A.) allows students interested in social work probation, parole, law or law enforcement to have a foundational understanding before transfer to the university for a bachelor of arts (B.A.) degree. Students directed toward probation, parole or corrections work are advised to select courses from the transfer core. Students seeking an associate of applied science (A.A.S.) in Criminal Justice have the opportunity to earn three certificates on the pathway to that degree. The A.A.S. transfers to a bachelor of applied arts and science (B.A.A.S.) degree at many universities.

Occupational Certificate

The criminal justice department at San Jacinto Community College District has voluntarily implemented the Peace Officer Training Articulation Advisory committee (POTAAC) agreement to articulate 18 hours of college credit for licensed peace officers in Texas that meet the following qualifications:

- Successfully completed an approved 560-hour law enforcement training program.
- Successfully passed the Texas Commission on Law Enforcement (TCLOE) licensing exam after 1983.
- Successfully completed six (6) semester hours of criminal justice at San Jacinto Community College District.
- Interested and qualified students should contact the department chair prior to enrollment.

The law enforcement option is for those students planning careers in criminal law, federal, state or local law enforcement, and for other students interested in learning about the operation of the criminal justice system.
Admission
No admission requirements.

Job entry requirements:
Some occupations in the criminal justice field require applicants to pass a background investigation, psychological exam, drug test, and physical examination.

Those entering law enforcement must pass all of the above as well as have no Class A or above convictions or no Class B convictions in the past 10 years.

Plan of Study
Central and North Campuses
6CRIJ-CORE

<table>
<thead>
<tr>
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<tr>
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<tr>
<td>CRIJ 1301/</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>CJS 1322</td>
<td></td>
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<tr>
<td>CRIJ 1306/</td>
<td>Court Systems and Practices</td>
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</tr>
<tr>
<td>CJS 1313</td>
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<tr>
<td>CRIJ 1310/</td>
<td>Fundamentals of Criminal Law</td>
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<tr>
<td>CJS 1327</td>
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<td>CRIJ 2328/</td>
<td>Police Systems and Practices</td>
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<td>CJS 1359</td>
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<tr>
<td>CRIJ 2313/</td>
<td>Correctional Systems and Practices</td>
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<td>CJCR 1307</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td>15</td>
</tr>
</tbody>
</table>

**Capstone Experience:** CRIJ 1306 Court Systems and Practices or CJS 1313 Court Systems and Practices

Criminal Justice, Associate of Applied Science

Program Information
Do you desire to make the world a better and safer place? Do you believe in justice and protection? If so, studying criminal justice at San Jacinto College is an excellent place to begin.

Our program prepares you for a variety of exciting and meaningful careers—law enforcement, emergency management, homeland security, corrections, probation, parole, and even social work. We offer a degree plan that prepares you for a career in criminal justice—one of the most popular, fascinating, and fastest growing fields. Choose this path, and you will be serving society with a chance to make the world a better place.

The San Jacinto College criminal justice program:
- Offers students a career that gives back to their community. When you study criminal justice at San Jacinto College, you are supporting safety as you train to serve as a professional in the criminal justice field;
- Prepares students to specialize in studies for their long-term goals that can lead to rewarding careers in social work, the FBI, pre-law, homeland security, and emergency management; and
- Is best for those individuals who want to pursue a challenging career in a criminal justice profession. Criminal justice is today's new liberal arts degree.

Additional Information
The Associate of Applied Science (AAS) degree offers the educational foundation needed in policing, social work, corrections, probation and parole. In addition, there are certificates that focus on educational direction and are centered around professional fields.

Upon proof of completion of a basic academy by having successfully passed the state's licensing exam, San Jacinto College will articulate 18.0 WECM semester hours upon completion of six hours of criminal justice courses in residency at San Jacinto College for working police officers based upon proof of having successfully passed the state's licensing exam. San Jacinto College exempts licensed Texas peace officers, who are employed as full-time officers, from tuition on criminal justice courses.

Career Opportunities
- Police Officers
- Parole Officers
- Probation Officers
- Adult Protective Service Officers
- Child Protective Service Officers
- Social Workers
- Pre-law
- Emergency Management
- Homeland Security
- FBI

Earning Potential
Brazoria County Sheriff's Office dispatcher: $16.06 per hour
Brazoria County Sheriff's Office detention deputy: $18.05 per hour
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¹ Source: www.brazoria-county.com (http://www.brazoria-county.com), 2017
³ Source: www.ppdcareer.com (http://www.ppdcareer.com), 2017
⁴ Source: www.rosenbergpolice.com (http://www.rosenbergpolice.com), 2017
⁵ Source: www.cityofwebster.com (http://www.cityofwebster.com), 2017

For more information, please contact Central Campus, 281-476-1873; or North Campus, 281-998-6150 ext. 7343.

Campuses

Central Campus
North Campus

Information

Criminal justice is an interdisciplinary program with enough flexibility to permit students to pursue diverse interest within the system. For example, an associate of arts (A.A.) allows students interested in social work probation, parole, law or law enforcement to have a foundational understanding before transfer to the university for a bachelor of arts (B.A.) degree. Students directed toward probation, parole or corrections work are advised to select courses from the transfer core. Students seeking an associate of applied science (A.A.S.) in Criminal Justice have the opportunity to earn three certificates on the pathway to that degree. The A.A.S. transfers to a bachelor of applied arts and science (B.A.A.S.) degree at many universities.

Associate of Arts Degree University Transfer Plan

Central and North Campuses

Students pursuing a four-year bachelor of arts (B.A.) degree should enroll in the associate of arts (A.A.) degree plan for a maximum of transferable credit. The A.A. is a 60-credit hour program, which may include the following courses in the major:

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<thead>
<tr>
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<th>Credits</th>
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<td>CRIJ 1306</td>
<td>Court Systems and Practices</td>
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<td>CRIJ 1310</td>
<td>Fundamentals of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 2313</td>
<td>Correctional Systems and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 2328</td>
<td>Police Systems and Practices</td>
<td>3</td>
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</table>

All students considering transfer should consult with a counselor regarding the specific requirements of various universities for this major.

Admission

No admission requirements.

Job entry requirements:

Some occupations in the criminal justice field require applicants to pass a background investigation, psychological exam, drug test, and physical examination.

Those entering law enforcement must pass all of the above as well as have no Class A or above convictions or no Class B convictions in the past 10 years.

Plan of Study

Central and North Campuses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>Introduction to Criminal Justice</td>
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<td>CRIJ 1306/CJSA 1313</td>
<td>Court Systems and Practices</td>
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</tr>
<tr>
<td>CRIJ 1310/CJSA 1327</td>
<td>Fundamentals of Criminal Law</td>
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<tr>
<td>CRIJ 2328/CJSA 1359</td>
<td>Police Systems and Practices</td>
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<td>CRIJ 2313/CJCR 1307</td>
<td>Correctional Systems and Practices</td>
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<tr>
<td>CRIJ 1307/CJSA 1312</td>
<td>Crime in America</td>
<td>3</td>
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<tr>
<td>CRIJ 1307/CJSA 1312</td>
<td>Crime in America</td>
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<tr>
<td>CRIJ 2323/CJSA 2300</td>
<td>Legal Aspects of Law Enforcement</td>
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<td>CRIJ 2314/CJSA 1342</td>
<td>Criminal Investigation</td>
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<td>CJSA 1348</td>
<td>Ethics in Criminal Justice</td>
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Credits                               15

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<td>CRIJ 1351</td>
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<td>CRIJ 1313/CJSA 1317</td>
<td>Juvenile Justice System</td>
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<td>CRIJ 2313/CRIJ 2301</td>
<td>Traffic Law and Investigation or Community Resources in Corrections</td>
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Credits                               15

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<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
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Credits                               15

Total Credits                           60

San Jacinto College 2018-2019
Capstone: CRIJ 2323 Legal Aspects of Law Enforcement or CJSA 2300 Legal Aspects of Law Enforcement

* Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.

Criminal Justice, Certificate of Technology

Program Information

Do you desire to make the world a better and safer place? Do you believe in justice and protection? If so, studying criminal justice at San Jacinto College is an excellent place to begin.

Our program prepares you for a variety of exciting and meaningful careers—law enforcement, emergency management, homeland security, corrections, probation, parole, and even social work. We offer a degree plan that prepares you for a career in criminal justice—one of the most popular, fascinating, and fastest growing fields. Choose this path, and you will be serving society with a chance to make the world a better place.

The San Jacinto College criminal justice program:

• Offers students a career that gives back to their community. When you study criminal justice at San Jacinto College, you are supporting safety as you train to serve as a professional in the criminal justice field;
• Prepares students to specialize in studies for their long-term goals that can lead to rewarding careers in social work, the FBI, pre-law, homeland security, and emergency management; and
• Is best for those individuals who want to pursue a challenging career in a criminal justice profession. Criminal justice is today’s new liberal arts degree.

Additional Information

The Associate of Applied Science (AAS) degree offers the educational foundation needed in policing, social work, corrections, probation and parole. In addition, there are certificates that focus on educational direction and are centered around professional fields.

Upon proof of completion of a basic academy by having successfully passed the state’s licensing exam, San Jacinto College will articulate 18.0 WECM semester hours upon completion of six hours of criminal justice courses in residency at San Jacinto College for working police officers based upon proof of having successfully passed the state’s licensing exam. San Jacinto College exempts licensed Texas peace officers, who are employed as full-time officers, from tuition on criminal justice courses.

Career Opportunities

• Police Officers
• Parole Officers
• Probation Officers
• Adult Protective Service Officers
• Child Protective Service Officers
• Social Workers
• Pre-law
• Emergency Management
• Homeland Security
• FBI

Earning Potential

Brazoria County Sheriff’s Office dispatcher: $16.06 per hour1

Brazoria County Sheriff’s Office detention deputy: $18.05 per hour1

Harris County detention officer: $35,071 to $50,132 per year2

Pasadena Police Department patrol officer starting salary: $55,680 per year3

Rosenberg Police Department police officer starting salary: $24.55 - $29.45 per hour4

Webster Police Department police officer cadet starting salary: $22.08 per hour ($45,926 per year)5

Webster Police Department police officer starting salary: $24.28 per hour ($50,519 per year) and $24.89 per hour ($51,781 per year) after six months probationary period.5

1 Source: www.brazoria-county.com (http://www.brazoria-county.com), 2017
3 Source: www.ppdcareer.com (http://www.ppdcareer.com), 2017
4 Source: www.rosenbergpolice.com (http://www.rosenbergpolice.com), 2017
5 Source: www.cityofwebster.com (http://www.cityofwebster.com), 2017

For more information, please contact Central Campus, 281-476-1873; or North Campus, 281-998-6150 ext. 7343.

Campuses

Central Campus
North Campus

Information

Criminal justice is an interdisciplinary program with enough flexibility to permit students to pursue diverse interest within the system. For example, an associate of arts (A.A.) allows students interested in social work probation, parole, law or law enforcement to have a foundational understanding before transfer to the university for a bachelor of arts
(B.A.) degree. Students directed toward probation, parole or corrections work are advised to select courses from the transfer core. Students seeking an associate of applied science (A.A.S.) in Criminal Justice have the opportunity to earn three certificates on the pathway to that degree. The A.A.S. transfers to a bachelor of applied arts and science (B.A.A.S.) degree at many universities.

Admission

No admission requirements.

Job entry requirements:

Some occupations in the criminal justice field require applicants to pass a background investigation, psychological exam, drug test, and physical examination.

Those entering law enforcement must pass all of the above as well as have no Class A or above convictions or no Class B convictions in the past 10 years.

Plan of Study

Central and North Campuses

4CRIJ

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<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<td>CRJ 1306/1</td>
<td>Court Systems and Practices</td>
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<td>CRJ 1310/1</td>
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<td>Criminal Justice Professions</td>
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<td>CJS 1342</td>
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<td>CJS 1348</td>
<td>Ethics in Criminal Justice</td>
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Capstone Experience: CRJ 2323 Legal Aspects of Law Enforcement or CJS 2300 Legal Aspects of Law Enforcement

Program Information

Do you desire to make the world a better and safer place? Do you believe in justice and protection? If so, studying criminal justice at San Jacinto College is an excellent place to begin.

Our program prepares you for a variety of exciting and meaningful careers—law enforcement, emergency management, homeland security, corrections, probation, parole, and even social work. We offer a degree plan that prepares you for a career in criminal justice—one of the most popular, fascinating, and fastest growing fields. Choose this path, and you will be serving society with a chance to make the world a better place.

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• Prepares students to specialize in studies for their long-term goals that can lead to rewarding careers in social work, the FBI, pre-law, homeland security, and emergency management; and
• Is best for those individuals who want to pursue a challenging career in a criminal justice profession. Criminal justice is today’s new liberal arts degree.

Additional Information

The Associate of Applied Science (AAS) degree offers the educational foundation needed in policing, social work, corrections, probation and parole. In addition, there are certificates that focus on educational direction and are centered around professional fields.

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Career Opportunities

• Police Officers
• Parole Officers
• Probation Officers
• Adult Protective Service Officers
• Child Protective Service Officers
• Social Workers
• Pre-law
• Emergency Management
• Homeland Security
• FBI

Earning Potential

Brazoria County Sheriff’s Office dispatcher: $16.06 per hour

Brazoria County Sheriff’s Office detention deputy: $18.05 per hour

Harris County detention officer: $35,071 to $50,132 per year

Pasadena Police Department patrol officer starting salary: $55,680 per year

Rosenberg Police Department patrol officer starting salary: $24.55 - $29.45 per hour

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Webster Police Department patrol officer starting salary: $24.28 per hour ($50,519 per year) and $24.89 per hour ($51,781 per year) after six months probationary period.

1 Source: www.brazoria-county.com, 2017
2 Source: www.hcsojobs.com/detentionofficer.aspx, 2017
3 Source: www.ppdcareer.com, 2017
4 Source: www.rosenbergpolice.com, 2017
5 Source: www.cityofwebster.com, 2017

For more information, please contact Central Campus, 281-476-1873; or North Campus, 281-998-6150 ext. 7343.

Campuses

Central Campus
North Campus

Information

Criminal justice is an interdisciplinary program with enough flexibility to permit students to pursue diverse interest within the system. For example, an associate of arts (A.A.) allows students interested in social work probation, parole, law or law enforcement to have a foundational understanding before transfer to the university for a bachelor of arts (B.A.) degree. Students directed toward probation, parole or corrections work are advised to select courses from the transfer core. Students seeking an associate of applied science (A.A.S.) in Criminal Justice have the opportunity to earn three certificates on the pathway to that degree. The A.A.S. transfers to a bachelor of applied arts and science (B.A.A.S.) degree at many universities.

Admission

No admission requirements.

Job entry requirements:

Some occupations in the criminal justice field require applicants to pass a background investigation, psychological exam, drug test, and physical examination.

Those entering law enforcement must pass all of the above as well as have no Class A or above convictions or no Class B convictions in the past 10 years.

Plan of Study Grid

Central and North Campuses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CRIJ 1301/ CJSA 1322</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 1306/ CJSA 1313</td>
<td>Court Systems and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 1310/ CJSA 1327</td>
<td>Fundamentals of Criminal Law</td>
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</tr>
<tr>
<td>CRIJ 2313/ CJCR 1307</td>
<td>Correctional Systems and Practices</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 2328/ CJSA 1359</td>
<td>Police Systems and Practices</td>
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Credits 15

Second Term

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<td>CJLE 1327</td>
<td>Interviewing and Report Writing for Criminal Justice Professions</td>
<td>3</td>
</tr>
<tr>
<td>CRIJ 2323/ CJSA 2300</td>
<td>Legal Aspects of Law Enforcement</td>
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<tr>
<td>CRIJ 2314/ CJSA 1342</td>
<td>Criminal Investigation</td>
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<tr>
<td>CJSA 1348</td>
<td>Ethics in Criminal Justice</td>
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Credits 15

Third Term

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<td>CJSA 1308</td>
<td>Criminalistics I</td>
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<td>CRIJ 1313/ CJSA 1317</td>
<td>Juvenile Justice System</td>
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<td>CJSA 1351</td>
<td>Use of Force</td>
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<tr>
<td>CRIJ 2301 or CJLE 1333</td>
<td>Community Resources in Corrections or Traffic Law and Investigation</td>
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Credits 15

Total Credits 45

Capstone Experience: CRIJ 2323 Legal Aspects of Law Enforcement or CJSA 2300 Legal Aspects of Law Enforcement
Culinary Arts - Chef Training/Restaurant Management, Occupational Certificate

Program Information

The restaurant management program at San Jacinto College provides training for supervisory positions throughout the hospitality industry. Courses are structured to cover the various operations of restaurants, hotels, cafeterias, coffee shops, catering operations, and other areas where management is necessary in the hospitality industry. Students in this program can earn an Associate of Applied Science (AAS) in restaurant management or a Certificate of Technology in restaurant management. Also, students can obtain a certificate of specialization in assistant restaurant and food manager or food protection management.

The San Jacinto College restaurant management program:

- Provides training for supervisory positions in commercial food service; and
- Is structured to cover the various operations of restaurants, hotel food service, cafeterias, coffee shops, catering, and other areas of food service specialty.

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services.

Career Opportunities

Students who obtain a certificate or degree in restaurant management pursue careers as managers in:

- Hotels
- Restaurants
- Private clubs
- Cruise lines
- Country clubs
- Sports venues

Earning Potential

Food Service Manager median salary: $58,759 per year

1 Source: texaswages.com (http://texaswages.com) Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1501 ext. 1353; or North Campus, 281-459-7201.

Campuses

Central Campus
North Campus

Information

The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Program of Study

Central Campus
6CULA-CTRM

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<td>CHEF 1401</td>
<td>Basic Food Preparation</td>
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<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
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<tr>
<td>IFWA 1318 or HECO 1322</td>
<td>Nutrition for the Food Service Professional or Nutrition and Diet Therapy</td>
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<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
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Capstone Experience: RSTO 1313 Hospitality Supervision

Culinary Arts - Pastry Chef Specialty, Associate of Applied Science

Program Information

Do you love food? Do you enjoy baking? Have a taste for a sweet life in a fast-paced, high-energy career? Dream of being the next celebrity chef? If so, San Jacinto College can help make your dreams come true! Our pastry chef program allows you to work within the industry while you build your education. If your ambitions are more specific, you can also choose to specialize as an assistant cook, baker or baker’s helper, or in basic cooking or specialty foods.

The San Jacinto College pastry chef program:

- Is a blend of lectures, labs, field trips, guest lecture presentations, networking opportunities, job placement, and a variety of skill sets taught by our state and nationally recognized chefs and professors;
• Places emphasis on fundamental and advanced culinary arts techniques and hands-on, real world learning through working with our program director, faculty, managers, chefs, and cooks to operate a full-service catering operation, the San Jac Gator Café and Grill, a gourmet bakery, and a fine dining restaurant; and
• Offers field trips to world-famous culinary destinations including Italy, Disney World, New Orleans, Detroit, and other local culinary events, food shows, and conventions

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services.

Additional Information
San Jacinto College offers scholarship opportunities, financial aid, a culinary club, and participation in a variety of culinary competitions.

Career Opportunities
• Cake Decorator
• Owner/Operator Bakery
• Bed and Breakfast Operator
• Pastry Chef/Baker
• Executive Pastry Chef
• Pastry Sous Chef
• Cruise Line Pastry Chef

Earning Potential
Baker median salary: $24,501
1 Source: texaswages.com (http://texaswages.com) Gulf Coast region, 2017

For more information, please contact North Campus, 281-459-7201.

Campuses
North Campus

Information
The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Associate of Applied Science Degree
The purpose of the pastry chef program is to provide students with an opportunity to specialize their degree plan in baking and pastry. Program graduates will acquire relevant knowledge and skills that will prepare them to work in this exciting industry. Pastry chef students will learn cake decorating, chocolates and confection sugars, bakeshop production, plate presentation, fundamentals of baking, food and beverage cost control, nutritional components of food and desserts, and basic supervisory skills.

Plan of Study
North Campus
3CULA-PC

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<tr>
<th>Course</th>
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<tr>
<td>CHEF 1205</td>
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<td>PSTR 2307</td>
<td>Cake Decorating II</td>
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<td>RSTO 2301</td>
<td>Principles of Food and Beverage Control</td>
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<td>CHEF 1310</td>
<td>Garde Manger</td>
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<td>PSTR 1343</td>
<td>Bakery Operations and Management</td>
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<td>MATH 1332</td>
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<td>Language, Philosophy, and Culture or Creative Arts</td>
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<tr>
<td>MRKG 1311</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
<td>3</td>
</tr>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</table>

Capstone Experience: PSTR 2365 Practicum - Baking and Pastry

1 Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.
Culinary Arts - Pastry Chef Specialty, Certificate of Technology

Program Information

Do you love food? Do you enjoy baking? Have a taste for a sweet life in a fast-paced, high-energy career? Dream of being the next celebrity chef? If so, San Jacinto College can help make your dreams come true! Our pastry chef program allows you to work within the industry while you build your education. If your ambitions are more specific, you can also choose to specialize as an assistant cook, baker or baker’s helper, or in basic cooking or specialty foods.

The San Jacinto College pastry chef program:

• Is a blend of lectures, labs, field trips, guest lecture presentations, networking opportunities, job placement, and a variety of skill sets taught by our state and nationally recognized chefs and professors;

• Places emphasis on fundamental and advanced culinary arts techniques and hands-on, real world learning through working with our program director, faculty, managers, chefs, and cooks to operate a full-service catering operation, the San Jac Gator Café and Grill, a gourmet bakery, and a fine dining restaurant; and

• Offers field trips to world-famous culinary destinations including Italy, Disney World, New Orleans, Detroit, and other local culinary events, food shows, and conventions

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services.

Additional Information

San Jacinto College offers scholarship opportunities, financial aid, a culinary club, and participation in a variety of culinary competitions.

Career Opportunities

• Cake Decorator
• Owner/Operator Bakery
• Bed and Breakfast Operator
• Pastry Chef/Baker
• Executive Pastry Chef
• Pastry Sous Chef
• Cruise Line Pastry Chef

Earning Potential

Baker median salary: $24,501

1 Source: texaswages.com (http://texaswages.com) Gulf Coast region, 2017

For more information, please contact North Campus, 281-459-7201.

Campuses

North Campus

Information

The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Certificate of Technology

The pastry chef program provides students an opportunity to specialize in baking and pastry. Courses in cake decorating, chocolates and confection sugars, and bakeshop production are just some of the exciting and challenging classes you will take on your road to becoming a pastry chef. As a pastry chef student, you will spend time learning from our award-winning chef instructors as you learn and operate in our state of the art kitchen and bakery.

North Campus’ culinary arts program is American Culinary Federation (ACF) certified and is currently the only pastry chef program with this certification at the community college level in the greater Houston area. The ACF is widely recognized as the most prestigious accreditation in the nation for a culinary education program. Upon graduation, students will be certified ACF pastry culinarians.

Program of Study

North Campus
4CULA-PC

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEF 1205</td>
<td>Sanitation and Safety</td>
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<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>PSTR 1306</td>
<td>Cake Decorating I</td>
<td>3</td>
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<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
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<tr>
<td>PSTR 1342</td>
<td>Quantity Bakeshop Production</td>
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<td>Credits</td>
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</table>

Second Term                          |                                                 |
| PSTR 2301   | Chocolates and Confections                | 3       |
| PSTR 2307   | Cake Decorating II                       | 3       |
| RSTO 2301   | Principles of Food and Beverage Control   | 3       |
| PSTR 2431   | Advanced Pastry Shop                      | 4       |
| PSTR 2365   | Practicum - Baking and Pastry (or Field Experience) | 3   

Credits 16
Earning Potential
Chef and Head Cook median salary: $41,531 per year¹

For more information, please contact Central Campus, 281-476-1501 ext. 1353; or North Campus, 281-459-7201.

Program Information
Do you love food? Do you enjoy cooking? Do you have a taste for a fast-paced, high-energy career in the kitchen? Do you dream of being the next celebrity chef? If so, San Jacinto College can help your dreams come true! Our program allows you to work within the industry while you build your education. If your ambitions are more specific, you can also choose to specialize as an assistant cook, baker or baker’s helper, or in basic cooking or specialty foods.

The San Jacinto College culinary arts program:

- Provides basic education and training for cooks and apprentice chefs; and
- Places emphasis on the development of technical food preparation and service skills, understanding of the principles of food composition, experience in the use of maintenance of professional food service equipment, and basic supervisory skills.

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum, and student services.

Career Opportunities
Our culinary arts program boasts a 100 percent job placement rate for students who want local or national employment in:

- Hotels
- Restaurants
- Private clubs

Plan of Study
Central and North Campuses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>CHEF 1205</td>
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<td>Basic Food Preparation</td>
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<td>PSTR 1301</td>
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<td>3</td>
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<td>IFWA 2446</td>
<td>Quantity Procedures</td>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
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Credits: 16

Second Term

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
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<tr>
<td>CHEF 1314</td>
<td>A La Carte Cooking</td>
<td>3</td>
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<tr>
<td>CHEF 1445</td>
<td>International Cuisine</td>
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<tr>
<td>CHEF 2302</td>
<td>Saucier</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

Credits: 16
Program Information

Do you love food? Do you enjoy cooking? Do you have a taste for a fast-paced, high-energy career in the kitchen? Do you dream of being the next celebrity chef? If so, San Jacinto College can help your dreams come true! Our program allows you to work within the industry while you build your education. If your ambitions are more specific, you can also choose to specialize as an assistant cook, baker or baker’s helper, or in basic cooking or specialty foods.

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Earning Potential

Chef and Head Cook median salary: $41,531 per year


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Campuses

Central Campus
North Campus

Information

The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Certificate of Technology

The culinary arts program is ACF (American Culinary Federation) certified, and is currently the only culinary arts program with this certification at the community college level in the greater Houston area. The ACF is widely recognized as the most prestigious accreditation in the nation for a culinary education program. Upon graduation, students will be certified ACF Culinarians.

Plan of Study Grid

Central and North Campus
4CULA

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
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<tr>
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</tr>
<tr>
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</tr>
</tbody>
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San Jacinto College

Program Information

The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Associate of Applied Science Degree

The culinary arts program provides training that will qualify graduates for supervisory positions in commercial food service. Courses are structured to cover the various operations of restaurants, hotel food service, cafeterias, coffee shops, catering and other areas of food service specialty.

Certification from the American Culinary Federation is one of the most prestigious honors that a learning culinarian can obtain. Our programs offered on Central Campus, including Culinary Arts-Chef Training and Restaurant Management, are recognized as a few of the select programs in the Houston area that have obtained the accreditation. Our goal is to provide the highest level of instruction to give students knowledge, skills and behaviors needed to transition into the next level of education or a beneficial career in the ever-growing hospitality industry.

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services.

Career Opportunities

Students who obtain a certificate or degree in restaurant management pursue careers as managers in:

• Hotels
• Restaurants
• Private clubs
• Cruise lines
• Country clubs
• Sports venues

Earning Potential

Food Service Manager median salary: $58,759 per year

1 Source: texaswages.com (http://texaswages.com) Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1501 ext. 1353; or North Campus, 281-459-7201.

Campuses

Central Campus
North Campus

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The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment and basic development of supervisory skills.

Program of Study

Central Campus
3CULA-RSTR
# Culinary, Restaurant Management, Certificate of Technology

<table>
<thead>
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<th>Course</th>
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<td>CHEF 1205</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>CHEF 1401</td>
<td>Basic Food Preparation</td>
<td>4</td>
</tr>
<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
<td>3</td>
</tr>
<tr>
<td>IFWA 1318 or HECO 1322</td>
<td>Nutrition for the Food Service Professional or Nutrition and Diet Therapy</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td><strong>Second Term</strong></td>
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<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>CHEF 2302</td>
<td>Saucier</td>
<td>3</td>
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<tr>
<td>RSTO 2301</td>
<td>Principles of Food and Beverage Control</td>
<td>3</td>
</tr>
<tr>
<td>CHEF 1402</td>
<td>Principles of Healthy Cuisine</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td>3</td>
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<td><strong>Summer Year One Term</strong></td>
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<tr>
<td>Speech</td>
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<tr>
<td><strong>Third Term</strong></td>
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<tr>
<td>HAMG 1340</td>
<td>Hospitality Legal Issues</td>
<td>3</td>
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<tr>
<td>HAMG 1319</td>
<td>Computers in Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>IFWA 1205</td>
<td>Food Service Equipment and Planning</td>
<td>2</td>
</tr>
<tr>
<td>RSTO 1304</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td></td>
<td>3</td>
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<tr>
<td><strong>Fourth Term</strong></td>
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<tr>
<td>RSTO 1325</td>
<td>Purchasing for Hospitality Operations</td>
<td>3</td>
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<td>RSTO 2365</td>
<td>Practicum (or Field Experience) - Restaurant, Culinary, and Catering Management/Manager</td>
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<td>ACNT 1303</td>
<td>Introduction to Accounting I</td>
<td>3</td>
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<tr>
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<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
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<td><strong>Capstone Experience</strong></td>
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* College Preparatory courses (those courses which have numbers beginning with (0) do not apply toward the associate of applied science degree.

** Program Information **

The restaurant management program at San Jacinto College provides training for supervisory positions throughout the hospitality industry. Courses are structured to cover the various operations of restaurants, hotels, cafeterias, coffee shops, catering operations, and other areas where management is necessary in the hospitality industry. Students in this program can earn an Associate of Applied Science (AAS) in restaurant management or a Certificate of Technology in restaurant management. Also, students can obtain a certificate of specialization in assistant restaurant and food manager or food protection management.

The San Jacinto College restaurant management program:

- Provides training for supervisory positions in commercial food service; and
- Is structured to cover the various operations of restaurants, hotel food service, cafeterias, coffee shops, catering, and other areas of food service specialty.

Accreditation by American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC) assures that a program is meeting at least a minimum of standards and competencies set for faculty, curriculum and student services.

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- Sports venues

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* Source: texaswages.com (http://texaswages.com) Gulf Coast region, 2017

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Campuses
Central Campus
North Campus

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Plan of Study
Central Campus
4CULA-RSTR

<table>
<thead>
<tr>
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</tr>
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<tr>
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<tr>
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<td>IFWA 1318</td>
<td>Nutrition for the Food Service Professional</td>
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<td>or HECO 1322</td>
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<td>CHEF 2302</td>
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<td>RSTO 2301</td>
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<td>CHEF 1402</td>
<td>Principles of Healthy Cuisine</td>
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<td>Third Term</td>
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<td>HAMG 1340</td>
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<td>RSTO 1304</td>
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<tr>
<td>ACNT 1303</td>
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<td>Total Credits</td>
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</table>

Capstone Experience: RSTO 1325 Purchasing for Hospitality Operations

Fire Protection, Chief Officer, Enhanced Skills Certificate

Program Information
Did you dream of being a firefighter when you were growing up? Many do, but few pursue becoming a true hero. If it is your dream to help save lives, then let San Jacinto College help you get on your way!

The San Jacinto College firefighter training academy:

- Is for aspiring firefighters looking to meet and exceed all state requirements to prepare students for a career as a firefighter; and
- Prepares students to take the Texas Commission on Fire Protection Basic Suppression Exam that certifies students for entry-level firefighter positions statewide.

The Associate of Applied Science (AAS) degree in firefighting is for academy graduates and current firefighters and provides additional fire-related education and certification opportunities.

Career Opportunities
Students who successfully complete the program requirements and the Texas Commission on Fire Protection Basic Suppression certification exam will be able to work as a firefighter in the state of Texas. Through international accreditation agreements, certified firefighters will also be able to work as firefighters in many other states.

Career opportunities include:

- Fire inspector
- Fire investigator
- Hazardous materials emergency response
- Emergency management

Earning Potential
Firefighter median salary: $50,257 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-476-1834.

Campus
Central Campus
Information

The fire protection technology department of San Jacinto Community College District offers three different educational programs for aspiring firefighters and current firefighters.

For aspiring firefighters, the College offers the Firefighter Training Academy. The academy meets and exceeds all state requirements for paid/career firefighters. Students seeking an entry-level firefighter position should begin here. See below for further information regarding the Firefighter Training Academy.

For academy graduates and current firefighters, the College offers an associate of applied science degree in firefighting. This program provides additional fire-related education and certification opportunities as well as courses in general education.

Students in the fire protection technology program must be potentially eligible to participate in certification examinations for firefighters upon successful completion of the prescribed course work. An applicant who has been convicted of a felony, implicated in substance abuse, or involved in activities considered inappropriate by the Texas Commission on Fire Protection may be ineligible to participate in the certification examination. Such an applicant should contact the Texas Commission on Fire Protection in Austin, Texas, for guidance in petitioning the Commission for a decision of eligibility. A copy of the Commission’s statement of eligibility should be submitted to San Jacinto Community College District’s fire protection technology chief training officer.

Firefighter Training Academy

The following courses meet and exceed the Texas Commission on Fire Protection’s curriculum requirements for Basic Fire Suppression Certification. Students who are not currently certified as an Emergency Medical Technician- Basic or higher will also need to complete the Emergency Medical Technician- Basic course. Please contact the fire protection program at 281-476-1834 for further information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<td>FIRS 1407</td>
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<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
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<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
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<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
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<td>FIRS 1329</td>
<td>Firefighter Certification VI</td>
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<td>FIRS 1433</td>
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</table>

Academy Information

New academy classes begin each summer and fall semester. Please contact the fire protection technology office for specific schedules and registration information. It is suggested that students contact the fire protection technology office a term in advance of anticipated enrollment, as classes fill quickly.

Firefighter Training Academy cadets must undergo a medical examination and physical performance test as defined in NFPA 1582, and submit approval documentation to the department’s chief training officer. Students not completing, or failing, the medical examination or the physical performance test are not eligible to continue in the academy and will be withdrawn. Students failing the medical examination or the physical performance test will be eligible for a 100 percent refund in accordance with the current refund policy if officially withdrawn in the registrar’s office on or before the 12th class day.

Administrative withdrawal from any San Jacinto Community College District course due to disciplinary action shall result in administrative withdrawal from the Firefighter Training Academy.

Certification Information

San Jacinto Community College District fire protection courses fulfill the educational requirements for numerous fire service certifications. Please contact the fire protection technology department on the Central Campus for specific information.

Enhanced Skills Certificate

The chief officer enhanced skills certificate is designed for students who have completed the Firefighting Associate of Applied Science Degree.

Plan of Study

Central Campus

EFIRE-CHOF

Please see Firefighting, Associate of Applied Science (p. 246) page for more information.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>FIRT 2356</td>
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<td>FIRT 2359</td>
<td>Fire Instructor III</td>
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<tr>
<td>FIRT 2357</td>
<td>Fire Officer IV</td>
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<tr>
<td>FIRT 2112</td>
<td>Hazardous Materials Incident Commander</td>
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<td>Credits</td>
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<td></td>
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</table>

Firefighting, Associate of Applied Science

Program Information

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Campus
Central Campus

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For aspiring firefighters, the College offers the Firefighter Training Academy. The academy meets and exceeds all state requirements for paid/career firefighters. Students seeking an entry-level firefighter position should begin here. See below for further information regarding the Firefighter Training Academy.

For academy graduates and current firefighters, the College offers an associate of applied science degree in firefighting. This program provides additional fire-related education and certification opportunities as well as courses in general education.

Students in the fire protection technology program must be potentially eligible to participate in certification examinations for firefighters upon successful completion of the prescribed course work. An applicant who has been convicted of a felony, implicated in substance abuse, or involved in activities considered inappropriate by the Texas Commission on Fire Protection may be ineligible to participate in the certification examination. Such an applicant should contact the Texas Commission on Fire Protection in Austin, Texas, for guidance in petitioning the Commission for a decision of eligibility. A copy of the Commission’s statement of eligibility should be submitted to San Jacinto Community College District’s fire protection technology chief training officer.

Firefighter Training Academy
The following courses meet and exceed the Texas Commission on Fire Protection’s curriculum requirements for Basic Fire Suppression Certification. Students who are not currently certified as an Emergency Medical Technician- Basic or higher will also need to complete the Emergency Medical Technician- Basic course. Please contact the fire protection program at 281-476-1834 for further information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>FIRS 1301</td>
<td>Firefighter Certification I</td>
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<tr>
<td>FIRS 1407</td>
<td>Firefighter Certification II</td>
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<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
<td>4</td>
</tr>
<tr>
<td>FIRS 1329</td>
<td>Firefighter Certification VI</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1433</td>
<td>Firefighter Certification VII</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits: 24

Academy Information
New academy classes begin each summer and fall semester. Please contact the fire protection technology office for specific schedules and registration information. It is suggested that students contact the fire protection technology office a term in advance of anticipated enrollment, as classes fill quickly.

Firefighter Training Academy cadets must undergo a medical examination and physical performance test as defined in NFPA 1582, and submit approval documentation to the department’s chief training officer. Students not completing, or failing, the medical examination or the physical performance test are not eligible to continue in the academy and will be withdrawn. Students failing the medical examination or the physical performance test will be eligible for a 100 percent refund in accordance with the current refund policy if officially withdrawn in the registrar’s office on or before the 12th class day.

Administrative withdrawal from any San Jacinto Community College District course due to disciplinary action shall result in administrative withdrawal from the Firefighter Training Academy.

Certification Information
San Jacinto Community College District fire protection courses fulfill the educational requirements for numerous fire service certifications. Please contact the fire protection technology department on the Central Campus for specific information.

Associate of Applied Science Degree
Persons who are currently certified by the Texas Commission on Fire Protection may enter the program with special permission from the department chair. Under this provision, Firefighter–Basic Certification is accepted in lieu of completion of the following Fire Protection courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRS 1301</td>
<td>Firefighter Certification I</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1407</td>
<td>Firefighter Certification II</td>
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</tr>
<tr>
<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
<td>4</td>
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</tbody>
</table>
Prospective students must satisfy the general admission requirements of the College and provide satisfactory evidence of basic firefighter certification to the fire protection technology department chair and the registrar.

### Plan of Study

#### Central Campus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FIRS 1301</td>
<td>Firefighter Certification I</td>
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</tr>
<tr>
<td>FIRS 1407</td>
<td>Firefighter Certification II</td>
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</tr>
<tr>
<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
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<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
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<tr>
<td>** Credits **</td>
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**First Term**

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>FIRS 1319</td>
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<td>FIRS 1329</td>
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<td>FIRS 1433</td>
<td>Firefighter Certification VII</td>
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**Second Term**

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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) or College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
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<td></td>
</tr>
<tr>
<td>FIRT 1327</td>
<td>Building Construction for the Fire Service</td>
<td>3</td>
</tr>
<tr>
<td>Approved Elective (p. 246)</td>
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**Third Term**

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<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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<tr>
<td>Speech</td>
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<tr>
<td>FIRT 2305</td>
<td>Fire Instructor I</td>
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<tr>
<td>Approved Elective (p. 246)</td>
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<tr>
<td>Approved Elective (p. 246)</td>
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**Fourth Term**

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>Social or Behavioral Sciences</td>
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<tr>
<td>FIRT 1319</td>
<td>Firefighter Health and Safety</td>
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<tr>
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**Summer Year Two Term**

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Verification of workplace competencies: Eligible for Credential Exams - Texas Commission on Fire Protection Basic Fire Suppression

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<th>Title</th>
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<tbody>
<tr>
<td>FIRT 1303</td>
<td>Fire and Arson Investigation I</td>
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</tr>
<tr>
<td>FIRT 1315</td>
<td>Hazardous Materials I</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1338</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1342</td>
<td>Fire Officer I</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1343</td>
<td>Fire Officer II</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1345</td>
<td>Hazardous Materials II</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1370</td>
<td>Technical Rope Rescue I</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 1408</td>
<td>Fire Inspector I</td>
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<tr>
<td>FIRT 1440</td>
<td>Fire Inspector II</td>
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</tr>
<tr>
<td>FIRT 2309</td>
<td>Firefighting Strategies and Tactics I</td>
<td>3</td>
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<tr>
<td>FIRT 2331</td>
<td>Firefighting Strategies and Tactics II</td>
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<tr>
<td>FIRT 2333</td>
<td>Fire and Arson Investigation II</td>
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<td>FIRT 2345</td>
<td>Hazardous Materials III</td>
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<tr>
<td>FIRT 2351</td>
<td>Company Fire Officer</td>
<td>3</td>
</tr>
<tr>
<td>FIRT 2370</td>
<td>Technical Rope Rescue II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Information**

Did you dream of being a firefighter when you were growing up? Many do, but few pursue becoming a true hero. If it is your dream to help save lives, then let San Jacinto College help you get on your way!

The San Jacinto College firefighter training academy:

- Is for aspiring firefighters looking to meet and exceed all state requirements to prepare students for a career as a firefighter; and
- Prepares students to take the Texas Commission on Fire Protection Basic Suppression certification exam that certifies students for entry-level firefighter positions statewide.

The Associate of Applied Science (AAS) degree in firefighting is for academy graduates and current firefighters and provides additional fire-related education and certification opportunities.

**Career Opportunities**

Students who successfully complete the program requirements and the Texas Commission on Fire Protection Basic Suppression certification exam will be able to work as a firefighter in the state of Texas. Through international accreditation agreements, certified firefighters will also be able to work as firefighters in many other states.
Career opportunities include:
- Fire inspector
- Fire investigator
- Hazardous materials emergency response
- Emergency management

**Earning Potential**
Firefighter median salary: $50,257 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-476-1834.

**Campus**
Central Campus

**Information**
The fire protection technology department of San Jacinto Community College District offers three different educational programs for aspiring firefighters and current firefighters.

For aspiring firefighters, the College offers the Firefighter Training Academy. The academy meets and exceeds all state requirements for paid/career firefighters. Students seeking an entry-level firefighter position should begin here. See below for further information regarding the Firefighter Training Academy.

For academy graduates and current firefighters, the College offers an associate of applied science degree in firefighting. This program provides additional fire-related education and certification opportunities as well as courses in general education.

Students in the fire protection technology program must be potentially eligible to participate in certification examinations for firefighters upon successful completion of the prescribed course work. An applicant who has been convicted of a felony, implicated in substance abuse, or involved in activities considered inappropriate by the Texas Commission on Fire Protection may be ineligible to participate in the certification examination. Such an applicant should contact the Texas Commission on Fire Protection in Austin, Texas, for guidance in petitioning the Commission for a decision of eligibility. A copy of the Commission’s statement of eligibility should be submitted to San Jacinto Community College District’s fire protection technology chief training officer.

**Firefighter Training Academy**
The following courses meet and exceed the Texas Commission on Fire Protection’s curriculum requirements for Basic Fire Suppression Certification. Students who are not currently certified as an Emergency Medical Technician- Basic or higher will also need to complete the Emergency Medical Technician- Basic course. Please contact the fire protection program at 281-476-1834 for further information.

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<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
<td>4</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>24</td>
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</tbody>
</table>

**Academy Information**
New academy classes begin each summer and fall semester. Please contact the fire protection technology office for specific schedules and registration information. It is suggested that students contact the fire protection technology office a term in advance of anticipated enrollment, as classes fill quickly.

Firefighter Training Academy cadets must undergo a medical examination and physical performance test as defined in NFPA 1582, and submit approval documentation to the department’s chief training officer. Students not completing, or failing, the medical examination or the physical performance test are not eligible to continue in the academy and will be withdrawn. Students failing the medical examination or the physical performance test will be eligible for a 100 percent refund in accordance with the current refund policy if officially withdrawn in the registrar’s office on or before the 12th class day.

Administrative withdrawal from any San Jacinto Community College District course due to disciplinary action shall result in administrative withdrawal from the Firefighter Training Academy.

**Certification Information**
San Jacinto Community College District fire protection courses fulfill the educational requirements for numerous fire service certifications. Please contact the fire protection technology department on the Central Campus for specific information.

**Plan of Study**
Central Campus
4FIREFTG

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
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<tr>
<td>FIRS 1301</td>
<td>Firefighter Certification I</td>
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<tr>
<td>FIRS 1407</td>
<td>Firefighter Certification II</td>
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<tr>
<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
<td>4</td>
</tr>
<tr>
<td>Credits</td>
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<td>14</td>
</tr>
<tr>
<td>Second Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
<td>3</td>
</tr>
<tr>
<td>FIRS 1329</td>
<td>Firefighter Certification VI</td>
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</tr>
<tr>
<td>FIRS 1433</td>
<td>Firefighter Certification VII</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 1501</td>
<td>Emergency Medical Technician</td>
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<tr>
<td>EMSP 1160</td>
<td>Clinical-Emergency Medical Technician</td>
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<td>Total Credits</td>
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</tbody>
</table>

**Capstone Experience:** Eligibility to sit for the Texas Commission on Fire Protection - Basic Fire Suppression exam.
Massage Therapy, Occupational Certificate

Program Information
Looking for a profession that’s literally hands-on? Are you passionate about helping people overcome injury, relieve stress, and generally live healthier lives? If so, San Jacinto College can prepare you for a career as a massage therapist in as few as two semesters. You will be introduced to a variety of massage modalities and discover what type of professional practice is right for you!

The San Jacinto College massage therapy program:

• Is a state approved program that provides foundational training in the art and science of therapeutic massage. Our 23-credit (592 contact-hour) program meets and exceeds the minimum educational requirements necessary for licensure in the state of Texas.
• Offers full-time students the possibility of completing the program in two semesters, so graduates can be licensed and working in less than one year.
• Places emphasis on a variety of massage therapy techniques, anatomy and physiology, kinesiology, pathology, healthy lifestyles, hygiene and sanitation, successful business practices, professional ethics, hydrotherapy, and spa modalities. Students also complete a hands-on clinical internship prior to graduating as required by the State of Texas.

Career Opportunities
Licensed massage therapists seek employment in:

• Massage therapy establishments
• Wellness centers
• Spas
• Cruise lines
• Medical settings
• Private practices

A large majority of licensed massage therapists are self-employed.

For more information contact one of the following:
281-998-6150 x 1479 or email Shelley.McCaul@sjcd.edu
281-991-2608 or email Kay.Richardson@sjcd.edu

Information
The Massage Therapy Occupational Certificate is a course of study designed to meet the needs of those students desiring to enter the massage therapy profession. Our program prepares students with the technical knowledge, lab skills and hands-on-training to successfully complete national licensing exams and gain licensure for the State of Texas as a licensed massage therapist. Full-time students can earn the occupational certificate in two (2) semesters. All key aspects of the massage therapy profession are addressed. Applicants must agree to be screened for criminal history as required by the Texas Department of State Health Services.

Admission
Required to pass a background check in order to receive massage therapy license.

Plan of Study
Central Campus
6MASG-THPY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>MSSG 1109</td>
<td>Health and Hygiene</td>
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<tr>
<td>MSSG 1411</td>
<td>Massage Therapy Fundamentals I</td>
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</tr>
<tr>
<td>MSSG 1413</td>
<td>Anatomy and Physiology for Massage</td>
<td>4</td>
</tr>
<tr>
<td>BMGT 1341</td>
<td>Business Ethics</td>
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<td>MSSG 2311</td>
<td>Massage Therapy Fundamentals II</td>
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<td>MSSG 2314</td>
<td>Pathology for Massage</td>
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<td>MSSG 2313</td>
<td>Kinesiology for Massage</td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

Restaurant Management
See Culinary Arts
SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM)

- CIT, Advanced Information Technology Security Specialty, Occupational Certificate
- CIT, Applications Programming Specialty, Associate of Applied Science
- CIT, Applications Programming, Certificate of Technology
- CIT, Applied Computer Electronics Technology
- CIT, Beginning Network Administration Cisco Specialty, Occupational Certificate
- CIT, Computer Information Technology Foundations, Occupational Certificate
- CIT, Desktop Support and Microsoft Network Administration, Associate of Applied Science Degree
- CIT, Desktop Support and Microsoft Network Administration, Certificate of Technology
- CIT, Information Technology Security Specialty, Associate of Applied Science
- CIT, Information Technology Security Specialty, Certificate of Technology
- CIT, Introductory Game Design and Development, Occupational Certificate
- CIT, Network Administration Cisco Specialty, Associate of Applied Science
- CIT, Network Administration Cisco Specialty, Certificate of Technology
- CIT, Simulation and Game Design, Associate of Applied Science
- CIT, Simulation and Game Design, Level 2 Certificate
- CIT, Web Applications Development Specialty, Associate of Applied Science
- CIT, Web Applications Development Specialty, Certificate of Technology
- CIT, Web Page Design and Implementation Specialty, Certificate of Technology
- Computer Science, Associate of Science
- Engineering Design Graphics Architectural/Civil/Structural Specialty, Associate of Applied Science
- Engineering Design Graphics Architectural/Civil/Structural Specialty, Certificate of Technology
- Engineering Design Graphics Mechanical Specialty, Associate of Applied Science
- Engineering Design Graphics Mechanical Specialty, Certificate of Technology
- Engineering Design Graphics Petro/Industrial Specialty, Associate of Applied Science
- Engineering Design Graphics Petro/Industrial Specialty, Certificate of Technology
- Engineering Design Graphics Petro/Industrial Specialty, Level 2 Certificate
- Engineering, Associate of Science in Engineering
- Life Sciences, Associate of Science
- Mathematics, Associate of Science
- Physical Sciences, Associate of Science

CIT, Advanced Information Technology Security Specialty, Occupational Certificate

Program Information

Are you passionate about the Internet? Are you fascinated by Web and Network security? If so, San Jacinto College's information technology security training can help you kick start a career in the network security field. This degree prepares students for entry level security certifications such as Security+. It lays the ground work for higher level certifications. As an Information Technologist, you can help keep hackers, viruses, and terrorists from intruding and damaging computers and networks.

The San Jacinto information technology (IT) curriculum:

- Is designed to provide students with an understanding of the principles and techniques of information technology;
- Prepares students to work in the network security field to help keep hackers, viruses, and terrorists from intruding and damaging computers; and
• Teaches students how to safeguard computer operating systems by teaching server support skills and designing and implementing security systems.

Additional Information

Some of our programming courses will be accepted for transfer to certain schools. Please speak with a counselor for more information on course transferability.

Due to variations in requirements at four-year colleges and universities, a student desiring to pursue a bachelor’s degree in computer science is strongly advised to consult the CIT department chair at San Jacinto College and at the institution to which they wish to transfer to review the appropriate transfer degree plans to the designated university. The field of study computer science, located in the SJCD degree catalog, may also be appropriate.

*The program is designed primarily for students seeking an occupational certificate, certificate of technology, or Associate of Applied Science (AAS) degree. The College recommends that students complete the 18 credit hour core information technology (IT) occupational certificate before continuing into a certificate of technology or AAS degree. The classes in the core IT occupational certificate will apply toward most of the other IT certificates of technology and AAS degrees.

Career Opportunities

Graduates of who earn an AAS degree or certificate of technology typically pursue careers as:

- Information technology security officers
- Network Operations Specialists
- VPN Engineers
- Chief Security Officers

For more information, please contact North Campus, 281-998-6150 ext. 7242; or South Campus, 281-929-4603.

Campuses

North Campus
South Campus

Information

The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology, or associate of applied science degree. Students can expect to complete most certificates in less than one year and degrees in as little as two years. For those students who have already fulfilled general education requirements, it may be possible to finish degree course work even sooner. It is generally recommended that students complete the 21 credit hour computer information technology (CIT) foundations occupational certificate before continuing into a certificate of technology or associate of applied science degree. Most courses in this occupational certificate will apply toward the other CIT certificates and A.A.S. degrees.

The computer information technology (CIT) curriculum provides the graduate with the knowledge and in-demand applied technical skills needed to enter computer-related occupations in the business/industry job market. Certificates and associate of applied science degrees are available in the following areas: applications programming, desktop support and Microsoft network administration, information technology security, simulation and game design, network administration Cisco, and Web applications development. The applications programming specialty is for students interested in writing computer programs, both stand-alone and web-based, in languages such as C++ and Java. Emphasis is placed on solving business-related computer problems through programming techniques and procedures, using appropriate languages and software. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on computer hardware and software support, or one with focus on the installation and maintenance of networks. Students will be exposed to current tools and techniques for implementing solutions for customers in network environments. The simulation and game design program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming. In the network administration Cisco specialty, emphasis is on the design, implementation, and administration of local and wide area router networks.

The Web application development program prepares students for entry-level positions in website design, development, and administration.

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study: beginning network administration, Cisco, and advanced information technology security. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certificate consists of only the courses required to obtain a specific certification.

Note for transfer students: Due to variations in requirements at four year colleges and universities, students desiring a bachelor’s degree in computer science are strongly advised to consult a CIT department chair at San Jacinto College and at the institution to which they wish to transfer. This communication regarding transfer degree plans with both computer department heads will help to ensure the transition process is as smooth as possible. The computer science field of study located elsewhere in the Catalog may also be appropriate.

Computer Information Technology Industry Certification Program

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study:

1. Beginning and advanced network administration and/or
2. Cisco Advanced information technology security

These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certificate consists of only the courses required to obtain a specific certification.

Occupational Certificate

The following certificate is for students that have experience in the computer information technology field. With this certificate or an associate of applied science degree, graduates can work in the network security field to help keep black hat hackers, computer viruses and cyber terrorists from stealing data and damaging computers. Common job titles include:

- IT Security Technician
- Computer Security Analyst I and II
- IT Security Engineer
• Network Security Analyst
• IT Governance and Security Analyst
• Senior IT Security Analyst
• Information System Security Officer
• Penetration Tester
• Security Architect
• Security Systems Administrator
• IT Security Consultant
• Cryptographer
• Cryptanalyst

Plan of Study
All Campuses
6IT-AITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>ITSY 2300</td>
<td>Operating System Security</td>
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<tr>
<td>ITSY 2301</td>
<td>Firewalls and Network Security</td>
<td>3</td>
</tr>
<tr>
<td>ITSY 2341</td>
<td>Security Management Practices</td>
<td>3</td>
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<td><strong>Credits</strong></td>
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<tr>
<td>Second Term</td>
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<tr>
<td>ITSY 2342</td>
<td>Incident Response and Handling</td>
<td>3</td>
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<tr>
<td>ITSY 2343</td>
<td>Computer System Forensics</td>
<td>3</td>
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<tr>
<td>ITSY 2345</td>
<td>Network Defense and Countermeasures</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Capstone Experience: ITSY 2345 Network Defense and Countermeasures

CIT, Applications Programming Specialty, Associate of Applied Science

Program Information
Do you want to know how software works? Do you want to write your own programs and apps? How would you like to design a program, write it, test it, and see it come to life? If so, San Jacinto College's computer information technology program might be the right program for you! It is designed to prepare graduates to continue to the university to complete a computer information systems or computer science degree. San Jacinto College's computer information technology (CIT) curriculum:

• Is designed to provide the student with an understanding of the principles of information technology, experience with techniques of information technology, and competence in the application of computer information systems;
• Places an emphasis on computer information technology and the use of computer languages in the solution of business and some scientific problems; and
• Will prepare entry-level application developers for employment in the area of business software application development. Graduates of this program will have designed, written, tested, and debugged programs in several major programming languages in both individual and team-oriented settings.

Additional Information
For students seeking a certificate of technology and/or Associate of Applied Science (AAS) degree, the College recommends completion of the 21 credit hour CIT foundations occupational certificate before continuing into a certificate of technology or AAS degree. The classes in the CIT foundations certificate will apply toward most of the other CIT certificates of technology and AAS degrees. Due to variations in requirements at four-year colleges and universities, the College strongly advises students desiring to pursue a bachelor's degree in computer science to consult the CIT Department Chair at San Jacinto College and at the institution to which they wish to transfer to review the appropriate transfer degree plans to the designated university. The field of study computer science, located in the San Jacinto College catalog, may also be appropriate.

Career Opportunities
Students who graduate from San Jacinto College with a degree or certificate in programming pursue careers as:

• Software Developer
• Computer Systems Analyst
• Entry (Junior Level) Programmer
• Programmer Analyst
• Software Applications Specialist
• Software Designer
• Software/Application Support

For more information, please contact, Central Campus, 281-476-1836; North Campus, 281-998-6150, ext. 7242; or South Campus, 281-998-6150, ext. 3502

Campuses
Central Campus
North Campus
South Campus

Information
The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology, or associate of applied science degree. Students can expect to complete most certificates in less than one year and degrees in as little as two years. For those students who have already fulfilled general education
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Associate of Applied Science Degree

Most employers require an associate degree for entry-level positions in this field. Common job titles for this degree are Entry-level Application Programmer and Software Developer.

Plan of Study

All Campuses

3IT-APPL

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1325 or ITCC 1314</td>
<td>Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1331</td>
<td>Introduction to Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>15</td>
</tr>
<tr>
<td>Second Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITSC 1319</td>
<td>Internet/Web Page Development</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1307</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSW 1307</td>
<td>Introduction to Database</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
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</tr>
<tr>
<td>Third Term</td>
<td></td>
<td></td>
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<tr>
<td>ITSE 2331</td>
<td>Advanced C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
<td>3</td>
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<tr>
<td>Approved Elective (p. 252)</td>
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<td>Select one of the following:</td>
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<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
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<tr>
<td>Life and Physical Sciences (Lec &amp; Lab)</td>
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<tr>
<td>ENGL 2311 or ENGL 1302</td>
<td>Technical and Business Writing or Composition II</td>
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<tr>
<td>Fourth Term</td>
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<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>Approved Elective (p. 252)</td>
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<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts 1</td>
<td>3</td>
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<tr>
<td>ITSE 2317</td>
<td>Java Programming</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ITSC 2364</td>
<td>Practicum - Computer and Information Sciences, General</td>
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<tr>
<td>Approved Elective (p. 252)</td>
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<td>3</td>
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<tr>
<td></td>
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<td>15</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>60</td>
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</tbody>
</table>

Capstone Experience: ITSE 2317 Java Programming

1 Courses, which satisfy the Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts) requirement are listed under “The Basics” Core Curriculum in the Educational Programs section, which is published in the San Jacinto Community College web catalog.

**Students must be Texas Success initiative (TSI) complete in order to graduate: Math level 8.

Approved Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAME 1303</td>
<td>Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1307</td>
<td>UNIX Operating System I</td>
<td>3</td>
</tr>
</tbody>
</table>
CIT, Applications Programming, Certificate of Technology

Program Information

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- Software/Application Support

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Campuses

Central Campus
North Campus
South Campus

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2. Cisco Advanced information technology security

These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certificate consists of only the courses required to obtain a specific certification.

**Certificate of Technology**

The Applications Programming Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for this certificate apply toward the Applications Programming Associate of Applied Science degree.

The following curriculum provides the student with basic application programming development skills. Common job titles for this certificate are Entry-level Application Programmer and Software Developer.

**Plan of Study**

**All Campuses**

4IT-APPL

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<td>ITNW 1325</td>
<td>Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks</td>
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<td>ITSE 1329</td>
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<td><strong>Second Term</strong></td>
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<tr>
<td>ITSE 1331</td>
<td>Introduction to Visual BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1307</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITCW 1307</td>
<td>Introduction to Database</td>
<td>3</td>
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<tr>
<td><strong>Third Term</strong></td>
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<tr>
<td>ITSE 2317</td>
<td>Java Programming</td>
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</tr>
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<td>ITSE 2331</td>
<td>Advanced C++ Programming</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ITSC 2364</td>
<td>Practicum - Computer and Information Sciences, General</td>
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<tr>
<td>Approved Elective (p. 254)</td>
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<td><strong>Credits</strong></td>
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<td><strong>9</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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**Capstone Experience:** ITSE 2331 Advanced C++ Programming

**Approved Electives**

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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GAME 1303</td>
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</tr>
<tr>
<td>ITSC 1321</td>
<td>Intermediate PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1345</td>
<td>Introduction to Oracle SQL</td>
<td>3</td>
</tr>
<tr>
<td>ITSY 1342</td>
<td>Information Technology Security</td>
<td>3</td>
</tr>
</tbody>
</table>

**CIT, Applied Computer Electronics Technology**

**CIT, Beginning Network Administration Cisco Specialty, Occupational Certificate**

**Program Information**

Are you interested in the way things work? Have you always wanted to build your own computer? If so, San Jacinto College's desktop support program can provide you with the skills to become a desktop and laptop computer hardware and software support expert. Our program teaches...
students to install, maintain, repair, replace, and upgrade computers to set you on course for a fulfilling career in the always booming tech industry.

The San Jacinto College’s network administration program:

- Provides students with the skills necessary to work as computer network service technicians, with an emphasis placed on installing and maintaining network;
- Is designed to provide the student with skills in desktop computer hardware and software support;
- Teaches students to install, maintain, repair, replace, and upgrade desktop computers; and
- Prepares students for industry certifications such as A+, Network+, Security+ and Microsoft Office Specialist (MOS), Microsoft Certified Professional (MCP), and Certified Cisco Network Associate (CCNA).

Career Opportunities

The Associate of Applied Science (AAS) in Desktop Support and Microsoft Networking is an excellent entry point into future studies leading to careers that include:

- Desktop Support Specialist
- Helpdesk Support
- PC Technician
- MS Network Administrator
- Network Technician
- Network Administrator
- Server Administrator
- Network Operations Specialist

Earning Potential

Network and Computer Systems Administrators median salary: $95,262 per year

Computer Network Support Specialist median salary: $70,660 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact North Campus, 281-998-6150 ext. 7242; Central Campus, 281-476-1836; or South Campus, 281-929-4603.

Campuses

North Campus
South Campus

Information

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Plan of Study

All Campuses

6IT-BC
The Computer Information Technology (CIT) Foundation certificate is recommended for students entering the CIT field. After earning the 21 hours for the certificate, students are eligible to continue their studies toward other certificates and an associate of applied science degree. Most courses in this occupational certificate will apply toward the other CIT certificates and A.A.S. degrees.

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San Jacinto College 2018-2019
CIT, Desktop Support and Microsoft Network Administration, Associate of Applied Science Degree

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1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact North Campus, 281-998-6150 ext. 7242; Central Campus, 281-476-1836; or South Campus, 281-929-4603.

Campuses
North Campus
South Campus

Information
The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology, or associate of applied science degree. Students can expect to complete most certificates in less than one year and degrees in as little as two years. For those students who have already fulfilled general education requirements, it may be possible to finish degree course work even sooner. It is generally recommended that students complete the 21 credit hour computer information technology (CIT) foundations occupational certificate before continuing into a certificate of technology or associate of applied science degree. Most courses in this occupational certificate will apply toward the other CIT certificates and A.A.S. degrees.

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**Desktop Support and Microsoft Network Administration**

The desktop support curriculum is designed to provide students with skills in desktop computer hardware and software support, and prepare them for exams leading to industry certifications such as A+, Net+, and Microsoft Office Specialist (MOS). Students will learn to install, maintain, repair, replace and upgrade desktop computers. Common job titles for this certificate include: Desktop Support Specialist, Helpdesk Support and PC Technician.

The Microsoft network administration curriculum is designed to provide students with basic skills needed to work as Microsoft computer network service technicians. Emphasis is placed upon the installation and maintenance of networks. A graduate will be able to administer and troubleshoot data and communication networks. These courses can lead to the Microsoft Certified Professional (MCP) and/or Microsoft Certified Systems Engineer (MCSE), Net+ and Server+ certifications. Common job titles for this certificate include network technician, network administrator, server administrator and network operations specialist.

**Plan of Study**

**All Campuses 3IT-DSMN**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>First Term</td>
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<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
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<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
</tr>
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<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
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<td>ITNW 1325</td>
<td>Fundamentals of Networking Technologies</td>
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<td>or ITCC 1314</td>
<td>or CCNA 1: Introduction to Networks</td>
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<td>Speech</td>
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<td>ITSC 1321</td>
<td>Intermediate PC Operating Systems</td>
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<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
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<td>Implementing and Supporting Servers</td>
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<td>College Algebra (or higher)</td>
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<td>Life and Physical Sciences (Lec &amp; Lab)</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>ITSC 1307</td>
<td>UNIX Operating System I</td>
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<tr>
<td>Approved Elective (p. 258)</td>
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</tr>
<tr>
<td>ITNW 1307</td>
<td>Introduction to Database</td>
<td>3</td>
</tr>
<tr>
<td>ITSY 1342</td>
<td>Information Technology Security</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 2339</td>
<td>Personal Computer Help Desk</td>
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<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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<td>or ENGL 1302</td>
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<td>ITSY 2300</td>
<td>Operating System Security</td>
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<tr>
<td>ITNW 1313</td>
<td>Computer Virtualization</td>
<td>3</td>
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<tr>
<td>Social and Behavioral Sciences ¹</td>
<td></td>
<td>3</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts ¹</td>
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<td>Select one of the following:</td>
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<td>ITSC 2364</td>
<td>Practicum - Computer and Information Sciences, General (or Approved Elective)</td>
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<td>Approved Elective (p. 258)</td>
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<td></td>
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<tr>
<td>Credits</td>
<td></td>
<td>15</td>
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</tbody>
</table>

| Total Credits|                                            | 60      |

**Capstone Experience:** ITNW 1313 Computer Virtualization

¹ Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

**Approved Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ITCC 1440</td>
<td>CCNA 2: Routing and Switching Essentials</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1307</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**Students must be Texas Success Initiative (TSI) complete in order to graduate: Math level 8.
CIT, Desktop Support and Microsoft Network Administration, Certificate of Technology

Program Information
Are you interested in the way things work? Have you always wanted to build your own computer? If so, San Jacinto College's desktop support program can provide you with the skills to become a desktop and laptop computer hardware and software support expert. Our program teaches students to install, maintain, repair, replace, and upgrade computers to set you on course for a fulfilling career in the always booming tech industry.

The San Jacinto College's network administration program:

- Provides students with the skills necessary to work as computer network service technicians, with an emphasis placed on installing and maintaining network;
- Is designed to provide the student with skills in desktop computer hardware and software support;
- Teaches students to install, maintain, repair, replace, and upgrade desktop computers; and
- Prepares students for industry certifications such as A+, Network+, Security+ and Microsoft Office Specialist (MOS), Microsoft Certified Professional (MCP), and Certified Cisco Network Associate (CCNA).

Career Opportunities
The Associate of Applied Science (AAS) in Desktop Support and Microsoft Networking is an excellent entry point into future studies leading to careers that include:

- Desktop Support Specialist
- Helpdesk Support
- PC Technician
- MS Network Administrator
- Network Technician
- Network Administrator
- Server Administrator
- Network Operations Specialist

Earning Potential
Network and Computer Systems Administrators median salary: $95,262 per year

Computer Network Support Specialist median salary: $70,660 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

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Campuses
North Campus
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The Web application development program prepares students for entry-level positions in website design, development, and administration.

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study beginning network administration, Cisco, and advanced information technology security. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each
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The desktop support curriculum is designed to provide students with skills in desktop computer hardware and software support, and prepare them for exams leading to industry certifications such as A+, Net+, and Microsoft Office Specialist (MOS). Students will learn to install, maintain, repair, replace and upgrade desktop computers. Common job titles for this certificate include: Desktop Support Specialist, Helpdesk Support and PC Technician.

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Plan of Study

All Campuses

<table>
<thead>
<tr>
<th>4IT-DSMN</th>
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</thead>
<tbody>
<tr>
<td><strong>Course</strong></td>
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<tr>
<td><strong>First Term</strong></td>
</tr>
<tr>
<td>ITSC 1305</td>
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<tr>
<td>ITSC 1309</td>
</tr>
<tr>
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</tr>
<tr>
<td>ITSE 1329</td>
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<td><strong>Credits</strong></td>
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<td><strong>Second Term</strong></td>
</tr>
<tr>
<td>ITSC 1325</td>
</tr>
<tr>
<td>ITNW 1354</td>
</tr>
<tr>
<td>ITSC 2339</td>
</tr>
<tr>
<td>ITSW 1307</td>
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<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Third Term</strong></td>
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<tr>
<td>ITNW 1313</td>
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<tr>
<td>ITSY 1342</td>
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<td>ITSC 1321</td>
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<td><strong>Select one of the following:</strong></td>
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<td>ITSC 2364</td>
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Approved Electives (p. 260)

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</tbody>
</table>

Capstone Experience: ITNW 1313 Computer Virtualization

CIT, Information Technology Security Specialty, Associate of Applied Science

Program Information

Are you passionate about the Internet? Are you fascinated by Web and Network security? If so, San Jacinto College’s information technology security training can help you kick start a career in the network security field. This degree prepares students for entry level security certifications such as Security+. It lays the ground work for higher level certifications. As an Information Technologist, you can help keep hackers, viruses, and terrorists from intruding and damaging computers and networks.

The San Jacinto information technology (IT) curriculum:

- Is designed to provide students with an understanding of the principles and techniques of information technology;
- Prepares students to work in the network security field to help keep hackers, viruses, and terrorists from intruding and damaging computers; and
- Teaches students how to safeguard computer operating systems by teaching server support skills and designing and implementing security systems.

Additional Information

Some of our programming courses will be accepted for transfer to certain schools. Please speak with a counselor for more information on course transferability.
Due to variations in requirements at four-year colleges and universities, a student desiring to pursue a bachelor’s degree in computer science is strongly advised to consult the CIT department chair at San Jacinto College and at the institution to which they wish to transfer to review the appropriate transfer degree plans to the designated university. The field of study computer science, located in the SJCD degree catalog, may also be appropriate.

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**Career Opportunities**

Graduates of who earn an AAS degree or certificate of technology typically pursue careers as:

- Information technology security officers
- Network Operations Specialists
- VPN Engineers
- Chief Security Officers

For more information, please contact North Campus, 281-998-6150 ext. 7242; or South Campus, 281-929-4603.

**Campuses**

North Campus
South Campus

**Information**

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**Information Technology Security**

With this certificate or associate of applied science degree, graduates can work in the network security field to help keep hackers, viruses and terrorists from intruding and damaging computers. Common job titles include: information technology security officer, network operations specialist, VPN engineer, and chief security officer.

**Plan of Study**

**All Campuses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td><strong>First Term</strong></td>
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<td>ITSY 1342</td>
<td>Information Technology Security</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<td></td>
<td><strong>Credits</strong></td>
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<td><strong>Second Term</strong></td>
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<td>ITSC 1307</td>
<td>UNIX Operating System I</td>
<td>3</td>
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<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
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<td>Operating System Security</td>
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<td>Credits</td>
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**Third Term**

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<td>ITSY 2301</td>
<td>Firewalls and Network Security</td>
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<td>ITSY 2341</td>
<td>Security Management Practices</td>
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<td>Speech</td>
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**Credits**

| 15 |

**Fourth Term**

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<td>ITSY 2343</td>
<td>Computer System Forensics</td>
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<tr>
<td>ITSY 2345</td>
<td>Network Defense and Countermeasures</td>
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<td>Technical and Business Writing or Composition II</td>
<td>3</td>
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<tr>
<td>Social or Behavioral Sciences</td>
<td>3</td>
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</tr>
</tbody>
</table>

**Capstone Experience**: ITSY 2345 Network Defense and Countermeasures

Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of "The Basics" Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

**Students must be Texas Success Initiative (TSI) complete in order to graduate: Math level 8.**

**CIT, Information Technology Security Specialty, Certificate of Technology**

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**Career Opportunities**

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The Web application development program prepares students for entry-level positions in website design, development, and administration.

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**Information Technology Security**

With this certificate or associate of applied science degree, graduates can work in the network security field to help keep hackers, viruses and terrorists from intruding and damaging computers. Common job titles include: information technology security officer, network operations specialist, VPN engineer, and chief security officer.

**Plan of Study**

All Campuses

<table>
<thead>
<tr>
<th>4IT-ITS</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tr>
<td><strong>First Term</strong></td>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITNW 1325 or ITCC 1314</td>
<td>Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks</td>
<td>3</td>
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<tr>
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<td>ITSY 1342</td>
<td>Information Technology Security</td>
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**Credits** 12

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<th>Course</th>
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<td><strong>Second Term</strong></td>
<td>ITNW 1354</td>
<td>Implementing and Supporting Servers</td>
<td>3</td>
</tr>
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<td></td>
<td>ITSC 1307</td>
<td>UNIX Operating System I</td>
<td>3</td>
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<tr>
<td></td>
<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
<td>3</td>
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<td></td>
<td>ITSY 2300</td>
<td>Operating System Security</td>
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| Credits | 12 |

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<tr>
<td><strong>Third Term</strong></td>
<td>ITSY 2301</td>
<td>Firewalls and Network Security</td>
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<td>ITSY 2341</td>
<td>Security Management Practices</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ITCW 1307</td>
<td>Introduction to Database</td>
<td>3</td>
</tr>
</tbody>
</table>

| Credits | 9 |

| Total Credits | 33 |

**Capstone Experience:** ITSY 2341 Security Management Practices

**CIT, Introductory Game Design and Development, Occupational Certificate**

**Program Information**

Are you a dreamer of worlds? Have you always been interested in playing the game as much as you’re interested in knowing how it was created? If so, a rewarding career in gaming may be in your future. At San Jacinto College, we teach the latest in game design and programming, simulation, level design, engine development, tool building, and multimedia programming. You’ll get your hands on the latest design applications and game engines, including multi-player and multimedia audio and video tools. Are you up to the challenge?

San Jacinto College’s Simulation and Gaming Technology program:

- Is designed for students who are interested in advanced programming areas, such as simulations, game design, game programming, level design, engine development tool building, and multimedia programming;
• Includes in-depth hands-on training with industry standard applications and game engines, as well as multi-player and multimedia (including audio and video) programming, and two semester project classes where students design and implement their own games or simulations; and
• Offers a simulation and game programming certificate program so students can enhance their training beyond the basic application programming certificate or Associate of Applied Science (AAS) degree.

Additional Information

Students must apply for admission to this program by contacting the Department Chair and verifying that they have the appropriate interest and drive to succeed in completing this program's certificate requirements.

Career Opportunities

The Computer Simulation and Gaming Program prepares students for careers in:

• Entry level programmer
• Game programmer
• Level designer
• Assistant game designer
• Game engine programmer
• Software tester

Earning Potential

Web developer Median Salary: $74,929 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact North Campus, 281-998-6150 ext. 7242; or South Campus, 281-998-6150 ext. 3502.

Campuses

North Campus
South Campus

Information

The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology, or associate of applied science degree. Students can expect to complete most certificates in less than one year and degrees in as little as two years. For those students who have already fulfilled general education requirements, it may be possible to finish degree course work even sooner. It is generally recommended that students complete the 21 credit hour computer information technology (CIT) foundations occupational certificate before continuing into a certificate of technology or associate of applied science degree. Most courses in this occupational certificate will apply toward the other CIT certificates and A.A.S. degrees.

The computer information technology (CIT) curriculum provides the graduate with the knowledge and in-demand applied technical skills needed to enter computer-related occupations in the business/industry job market. Certificates and associate of applied science degrees are available in the following areas: applications programming, desktop support and Microsoft network administration, information technology security, simulation and game design, network administration Cisco, and Web applications development. The applications programming specialty is for students interested in writing computer programs, both stand-alone and web-based, in languages such as C++ and Java. Emphasis is placed on solving business-related computer problems through programming techniques and procedures, using appropriate languages and software. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on computer hardware and software support, or one with focus on the installation and maintenance of networks. Students will be exposed to current tools and techniques for implementing solutions for customers in network environments. The simulation and game design program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming. In the network administration Cisco specialty, emphasis is on the design, implementation, and administration of local and wide area router networks.

The Web application development program prepares students for entry-level positions in website design, development, and administration.

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study beginning network administration, Cisco, and advanced information technology security. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certificate consists of only the courses required to obtain a specific certification.

For transfer students: Due to variations in requirements at four year colleges and universities, students desiring a bachelor's degree in computer science are strongly advised to consult a CIT department chair at San Jacinto College and at the institution to which they wish to transfer. This communication regarding transfer degree plans with both computer department heads will help to ensure the transition process is as smooth as possible. The computer science field of study located elsewhere in the Catalog may also be appropriate.

Simulation and Game Programming Certificate Program

Students must apply for admission to this program by contacting the department chair and verifying that they have the appropriate interest and drive to succeed in this program's certificates.

The CIT simulation and game programming certificate program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing and/or multimedia programming.

Plan of Study

All Campuses
6IT GAME

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAME 1303</td>
<td>Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>INEW 2340</td>
<td>Object-Oriented Design - Game Design</td>
<td>3</td>
</tr>
</tbody>
</table>
San Jacinto College 2018-2019

Program Information

Are you interested in the way things work? Have you always wanted to build your own computer? If so, San Jacinto College’s desktop support program can provide you with the skills to become a desktop and laptop computer hardware and software support expert. Our program teaches students to install, maintain, repair, replace, and upgrade computers to set you on course for a fulfilling career in the always booming tech industry.

The San Jacinto College’s network administration program:

- Provides students with the skills necessary to work as computer network service technicians, with an emphasis placed on installing and maintaining network;
- Is designed to provide the student with skills in desktop computer hardware and software support;
- Teaches students to install, maintain, repair, replace, and upgrade desktop computers; and
- Prepares students for industry certifications such as A+, Network+, Security+ and Microsoft Office Specialist (MOS), Microsoft Certified Professional (MCP), and Certified Cisco Network Associate (CCNA).

Career Opportunities

The Associate of Applied Science (AAS) in Desktop Support and Microsoft Networking is an excellent entry point into future studies leading to careers that include:

- Desktop Support Specialist
- Helpdesk Support
- PC Technician
- MS Network Administrator
- Network Technician
- Network Administrator
- Server Administrator
- Network Operations Specialist

Earning Potential

Network and Computer Systems Administrators median salary: $95,262 per year

Computer Network Support Specialist median salary: $70,660 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact North Campus, 281-998-6150 ext. 7242; Central Campus, 281-476-1836; or South Campus, 281-929-4603.

Campuses

North Campus
South Campus

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Network Administration Cisco

The following curriculum is designed to provide the student with the skills needed to work as a Cisco network technician. Emphasis is placed upon the installation and maintenance of networks in business and industry. The graduate will be able to administer and troubleshoot Cisco networking equipment and networking infrastructure. The Cisco courses can lead to the certifications of Certified Cisco Network Associate (CCNA), Certified Cisco Network Professional (CCNP), and Comptia Net+. Common job titles for graduates of the certificate and/or degree include network technician, Cisco service representative, technical support specialist, and network system administration.

Plan of Study

All Campuses

3IT-NW-C

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tr>
<td>First Term</td>
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<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
<td>3</td>
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<tr>
<td>ITCC 1314</td>
<td>CCNA 1: Introduction to Networks</td>
<td>3</td>
</tr>
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<td></td>
<td>Credits</td>
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<tr>
<td>Second Term</td>
<td></td>
<td></td>
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<tr>
<td>ITCC 1440</td>
<td>CCNA 2: Routing and Switching Essentials</td>
<td>4</td>
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<tr>
<td>ITSC 1321</td>
<td>Intermediate PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329 or ITSE 1331</td>
<td>Programming Logic and Design or Introduction to Visual BASIC Programming</td>
<td>3</td>
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<td>Select one of the following:</td>
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Capstone Experience: ITCC 2413 CCNA 4: Connecting Networks

Approved Electives

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<tr>
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<tr>
<td>ITNW 1345</td>
<td>Implementing Network Directory Services</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1307</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 2339</td>
<td>Personal Computer Help Desk</td>
<td>3</td>
</tr>
</tbody>
</table>

**Students must be Texas Success Initiative (TSI) complete in order to graduate: Math Level 8
CIT, Network Administration Cisco Specialty, Certificate of Technology

Program Information

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Campuses

North Campus
South Campus

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Plan of Study

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<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
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<td>CCNA 1: Introduction to Networks</td>
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</tr>
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<td>ITSC 1325</td>
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<td><strong>Credits</strong></td>
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<tr>
<td>ITCC 1440</td>
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</tr>
<tr>
<td>ITNW 1354</td>
<td>Implementing and Supporting Servers</td>
<td>3</td>
</tr>
<tr>
<td>ITCW 1307</td>
<td>Introduction to Database</td>
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<td>CCNA 3: Scaling Networks</td>
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<td>ITCC 2413</td>
<td>CCNA 4: Connecting Networks</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>11</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>36</strong></td>
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</table>

Capstone Experience: ITCC 2413 CCNA 4: Connecting Networks

CIT, Simulation and Game Design, Associate of Applied Science

Program Information

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San Jacinto College’s Simulation and Gaming Technology program:

- Is designed for students who are interested in advanced programming areas, such as simulations, game design, game programming, level design, engine development tool building, and multimedia programming;
- Includes in-depth hands-on training with industry standard applications and game engines, as well as multi-player and multimedia (including audio and video) programming, and two semester project classes where students design and implement their own games or simulations; and
- Offers a simulation and game programming certificate program so students can enhance their training beyond the basic application programming certificate or Associate of Applied Science (AAS) degree.

Additional Information

Students must apply for admission to this program by contacting the Department Chair and verifying that they have the appropriate interest and drive to succeed in completing this program’s certificate requirements.

Career Opportunities

The Computer Simulation and Gaming Program prepares students for careers in:

- Entry level programmer
- Game programmer
The computer information technology (CIT) curriculum provides the graduate with the knowledge and in-demand applied technical skills needed to enter computer-related occupations in the business/industry job market. Certificates and associate of applied science degrees are available in the following areas: applications programming, desktop support and Microsoft network administration, information technology security, simulation and game design, network administration Cisco, and Web applications development. The applications programming specialty is for students interested in writing computer programs, both stand-alone and web-based, in languages such as C++ and Java. Emphasis is placed on solving business-related computer problems through programming techniques and procedures, using appropriate languages and software. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on computer hardware and software support, or one with focus on the installation and maintenance of networks. Students will be exposed to current tools and techniques for implementing solutions for customers in network environments. The simulation and game design program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming. In the network administration Cisco specialty, emphasis is on the design, implementation, and administration of local and wide area router networks.

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## Plan of Study

### All Campuses
3IT- SGD

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>GAME 1303</td>
<td>Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>INEW 2340</td>
<td>Object-Oriented Design - Game Design</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1319</td>
<td>Internet/Web Page Development</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1329 or COSC 1336</td>
<td>Programming Logic and Design or Programming Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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#### Select one of the following: 3 credits

- ITSE 1307 Introduction to C++ Programming
- COSC 1337 Programming Fundamentals II
- ARTV 1345 3-D Modeling and Rendering
- IMED 1341 Interface Design with Photoshop
- GAME 1304 Level Design
- GAME 2341 Game Scripting
- ITSE 1359 Introduction to Scripting Languages

#### Credits 15

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>GAME 1343 or ARTV 2351</td>
<td>Game and Simulation Programming I or 3-D Animation II</td>
</tr>
</tbody>
</table>

San Jacinto College 2018-2019
Capstone Experience: GAME 2359 Game & Simulation Group Project

**Additional Information**

Students must apply for admission to this program by contacting the Department Chair and verifying that they have the appropriate interest and drive to succeed in completing this program’s certificate requirements.

**Career Opportunities**

The Computer Simulation and Gaming Program prepares students for careers in:

- Entry level programmer
- Game programmer
- Level designer
- Assistant game designer
- Game engine programmer
- Software tester

**Earning Potential**

Web developer Median Salary: $74,929 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

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**Campuses**

North Campus
South Campus

**Information**

The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology, or associate of applied science degree. Students can expect to complete most certificates in less than one year and degrees in as little as two years. For those students who have already fulfilled general education requirements, it may be possible to finish degree course work even sooner. It is generally recommended that students complete the 21 credit hour computer information technology (CIT) foundations occupational certificate before continuing into a certificate of technology or associate of applied science degree. Most courses in this occupational certificate will apply toward the other CIT certificates and A.A.S. degrees.

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is for students interested in writing computer programs, both stand-alone and web-based, in languages such as C++ and Java. Emphasis is placed on solving business-related computer problems through programming techniques and procedures, using appropriate languages and software. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on computer hardware and software support, or one with focus on the installation and maintenance of networks. Students will be exposed to current tools and techniques for implementing solutions for customers in network environments. The simulation and game design program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming. In the network administration Cisco specialty, emphasis is on the design, implementation, and administration of local and wide area router networks.

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Simulation and Game Programming Certificate Program

Students must apply for admission to this program by contacting the department chair and verifying that they have the appropriate interest and drive to succeed in this program's certificates.

The CIT simulation and game programming certificate program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing and/or multimedia programming.

Plan of Study

All Campuses
5IT-SGD

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAME 1303</td>
<td>Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>INEW 2340</td>
<td>Object-Oriented Design - Game Design</td>
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<td>ITSC 1319</td>
<td>Internet/Web Page Development</td>
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<tr>
<td>ITSE 1329</td>
<td>Programming Logic and Design</td>
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<tr>
<td>or COSC 1336</td>
<td>or Programming Fundamentals I</td>
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Second Term

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<tr>
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<tbody>
<tr>
<td>IMED 1341</td>
<td>Interface Design with Photoshop</td>
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<tr>
<td>GAME 1304</td>
<td>Level Design</td>
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<tr>
<td>GAME 2341</td>
<td>Game Scripting</td>
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<td>ITSE 1359</td>
<td>Introduction to Scripting Languages</td>
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<td>ITSE 2331</td>
<td>Advanced C++ Programming</td>
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<tr>
<td>COSC 2336</td>
<td>Programming Fundamentals III</td>
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<tr>
<td>ARTV 1341</td>
<td>3-D Animation I</td>
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Third Term

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>GAME 2332</td>
<td>Project Development I</td>
<td>3</td>
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<tr>
<td>ITSE 1333</td>
<td>Mobile Applications Development</td>
<td>3</td>
</tr>
<tr>
<td>GAME 1343</td>
<td>Game and Simulation Programming I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTV 2351</td>
<td>or 3-D Animation II</td>
<td>9</td>
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Fourth Term

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ITSE 2313</td>
<td>Web Authoring</td>
<td>3</td>
</tr>
<tr>
<td>or ITSE 2317</td>
<td>or Java Programming</td>
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</tr>
<tr>
<td>GAME 2359</td>
<td>Game &amp; Simulation Group Project</td>
<td>3</td>
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</tbody>
</table>

Total Credits 45

Capstone Experience: GAME 2359 Game & Simulation Group Project

CIT, Web Applications Development Specialty, Associate of Applied Science

Program Information

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At San Jacinto College our web page programming curriculum:

- Is designed to provide the student with basic web applications development skills.
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- Will train students to understand how web pages connect to data sources and back-end data servers.
- Offers two paths: The web applications development certificate of technology is designed for students who desire to earn their credential after three semesters of study. All courses required for this certificate will also apply toward the Web Applications Development Specialty Associate of Applied Science (AAS) degree.

San Jacinto College 2018-2019
Additional Information

Note for transfer students: Some of the courses for this degree will be accepted for transfer to certain colleges/universities. Students are encouraged to check with a counselor for details on course transferability. San Jacinto College offers two courses of study in this area that include computer information technology and computer science.

Career Opportunities

An AAS degree or certificate of technology prepares students for a career as a:

- Webmaster
- Web specialist
- Web applications developer
- Web designer
- Mobile apps developer

Earning Potential

Web developer Median Salary: $72,018 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact 281-998-6150 ext. 7242

Campus

North Campus

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Web Development

Web development is divided into two major areas: web page programming and web page design. Web page programming focuses on connecting web pages to data sources and back-end data servers. Web page design focuses on the aesthetic layout and artistic style of the website.

Associate of Applied Science Degree

The following degree is designed to provide the student with basic Web applications development skills. Common job titles for this degree include webmaster, web specialist, web applications developer or web designer.

Plan of Study

All Campuses

3IT-WBDV

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>ITCW 1307</td>
<td>Introduction to Database</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1325 or ITCC 1314</td>
<td>Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1319</td>
<td>Internet/Web Page Development</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>15</td>
</tr>
<tr>
<td>Second Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMED 1341</td>
<td>Interface Design with Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1305</td>
<td>Introduction to PC Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1359</td>
<td>Introduction to Scripting Languages</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 2313</td>
<td>Web Authoring</td>
<td>3</td>
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Select one of the following:  

<table>
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<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
<td>3</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra (or higher)</td>
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</tr>
<tr>
<td>Life and Physical Sciences (Lec &amp; Lab)</td>
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**Credits**: 15

**Third Term**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>IMED 1316</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2311</td>
<td>Web Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 1333</td>
<td>Mobile Applications Development</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences ¹</td>
<td></td>
<td>3</td>
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</table>

**Credits**: 15

**Fourth Term**

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing or Composition II</td>
<td>3</td>
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Select one of the following:  

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ITSE 1345</td>
<td>Introduction to Oracle SQL</td>
<td>3</td>
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</tbody>
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Approved Elective (p. 273)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts ¹</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ITSY 1342</td>
<td>Information Technology Security</td>
<td>3</td>
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Select one of the following:  

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ITSC 2364</td>
<td>Practicum - Computer and Information Sciences, General</td>
<td>3</td>
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</tbody>
</table>

Approved Elective (p. 273)

**Credits**: 15

**Total Credits**: 60

**Capstone Experience**: IMED 2311 Web Portfolio Development

¹ Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

**Approved Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GAME 1303</td>
<td>Introduction to Game Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1307</td>
<td>UNIX Operating System I</td>
<td>3</td>
</tr>
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<td>ITSE 1345</td>
<td>Introduction to Oracle SQL</td>
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</tbody>
</table>

**²Students must be Texas Success Initiative (TSI) complete in order to graduate: Math level 8.**

**CIT, Web Applications Development Specialty, Certificate of Technology Program Information**

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**Additional Information**

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- Web designer
- Mobile apps developer

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**Web Development**

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**Certificate of Technology**

The Web Applications Development Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for this certificate apply toward the Web Applications Development Associate of Applied Science degree. The following curriculum is designed to provide the student with basic web applications development skills. Emphasis is placed upon designing web applications to communicate with data sources and business systems. Common job titles for this certificate include webmaster, web specialist, web application developer and web designer.

**Plan of Study**

**All Campuses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
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<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1319</td>
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</tr>
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<td>ITCW 1325</td>
<td>Fundamentals of Networking Technologies</td>
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<td>or ITCW 1314</td>
<td>or CCNA 1: Introduction to Networks</td>
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**Second Term**

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<tbody>
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<td>IMED 1341</td>
<td>Interface Design with Photoshop</td>
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</tr>
<tr>
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<td>Introduction to Scripting Languages</td>
<td>3</td>
</tr>
<tr>
<td>ITSE 2313</td>
<td>Web Authoring</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1305</td>
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<tr>
<td>Total Credits</td>
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**Third Term**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>IMED 2311</td>
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<td>ITSE 1333</td>
<td>Mobile Applications Development</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ITSE 2364</td>
<td>Practicum - Computer and Information Sciences, General</td>
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<tr>
<td>Approved Elective (p. 274)</td>
<td></td>
<td></td>
</tr>
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<td>Total Credits</td>
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**Capstone Experience:** IMED 2311 Web Portfolio Development

**Approved Electives**

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<tr>
<th>Code</th>
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</table>

**CIT, Web Page Design and Implementation Specialty, Certificate of Technology**

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The computer information technology (CIT) curriculum provides the graduate with the knowledge and in-demand applied technical skills needed to enter computer-related occupations in the business/industry job market. Certificates and associate of applied science degrees are available in the following areas: applications programming, desktop support and Microsoft network administration, information technology security, simulation and game design, network administration Cisco, and Web applications development. The applications programming specialty is for students interested in writing computer programs, both stand-alone and web-based, in languages such as C++ and Java. Emphasis is placed on solving business-related computer problems through programming techniques and procedures, using appropriate languages and software. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on computer hardware and software support, or one with focus on the installation and maintenance of networks. Students will be exposed to current tools and techniques for implementing solutions for customers in network environments. The simulation and game design program is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming. In the network administration Cisco specialty, emphasis is on the design, implementation, and administration of local and wide area router networks.

The Web application development program prepares students for entry-level positions in website design, development, and administration.

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study: beginning network administration, Cisco, and advanced information technology security. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certificate consists of only the courses required to obtain a specific certification.

Note for transfer students: Due to variations in requirements at four year colleges and universities, students desiring a bachelor’s degree in computer science are strongly advised to consult a CIT department chair at San Jacinto College and at the institution to which they wish to transfer. This communication regarding transfer degree plans with both computer department heads will help to ensure the transition process is as smooth as possible. The computer science field of study located elsewhere in the Catalog may also be appropriate.

Web Development

Web development is divided into two major areas: web page programming and web page design. Web page programming focuses on connecting web pages to data sources and back-end data servers. Web page design focuses on the aesthetic layout and artistic style of the website.

Certificate of Technology

The following trans-departmental curriculum between computer information technology and art is designed to provide the student with basic web applications development skills. Emphasis is placed on artistic and graphic design with basic programming skills. Common job titles for this certificate include webmaster, web specialist, web applications developer and web designer.

Plan of Study

All Campuses
4IT-WBDI

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITSC 1319</td>
<td>Internet/Web Page Development</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1301</td>
<td>Introduction to Digital Media</td>
<td>3</td>
</tr>
</tbody>
</table>
Get an Exciting Job in the Tech Industry

Are you good in math and science and want to know how computer systems work? Have you ever wondered how computers store data, or how artificial intelligence helps find Internet information faster or makes games better, or how computers have changed society? Would you like to learn how to write your own programs and applications?

San Jacinto College’s Associate of Science in Computer Science may be the right program for you! It is designed to prepare graduates for transfer to the universities to complete computer information system or computer science bachelor’s degrees.

Students also may seek an occupational certificate, certificate of technology or Associate of Applied Science in Application Programming.

Other computer related areas of study include Website Applications Development, Desktop Support and Microsoft Networking, Cisco Networking, and Information Technology Security.

Some of the programming courses will be accepted for transfer to certain schools, but please check with an educational planner for more details on course transferability.

Career Opportunities

- Artificial Intelligence
- Computer Architecture & Engineering
- Database Management Systems
- Graphics Systems
- Human-Computer Interaction
- Operating Systems & Networking
- Programming Systems
- Scientific Computing
- Security

Earning Potential

Software developer (applications) - $105,160
Software developer (systems software) - $105,333
Database administrator - $79,266
Computer hardware engineer - $110,021
Computer systems analyst - $98,628
Web developer - $70,180
Information security analyst - $101,338
Computer programmer - $81,014
Computer and information systems managers - $157,226

1 Source: www.texaswages.com (https://publications.sanjac.edu/areas-study/science-technology-engineering-math/computer-science-as/www.texaswages.com) 2017 annual median salaries, Gulf Coast region

The associate of science degree (A.S.) is designed for students who plan to transfer to a four-year or upper-level college or university and major in mathematics, one of the sciences (biology, chemistry, geology, physics, biotechnology or related field), engineering or computer science. (See the Core Curriculum and Field of Study sections.) The associate of science degree differs from an associate of arts degree in the amount or level of mathematics and science required for degree completion. A minimum of 12 hours of mathematics, 12 hours in science, or 12 hours in computer sciences beyond the core requirement will be required for the degree. Please note the Field of Study associate of science degree options contain state-required courses recommended for the degree.

Students seeking an associate of science degree should take science courses designed for majors rather than courses for non-majors. Science courses designed for allied health students are not intended for academic transfer towards a science major.

Students choosing to pursue an associate of science degree should select from among life science, physical science, computer science or mathematics. However, courses designed for non-majors (BIOL 1308 Biology for Non-Science Majors I (lecture)/BIOL 1108 Biology for Non-Science Majors I (lab), BIOL 1309 Biology for Non-Science Majors II (lecture)/BIOL 1109 Biology for Non-Science Majors II (lab), and CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)) do not apply to an A.S. degree. They are recommended for the associate of arts degrees.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 1336 &amp; COSC 1337</td>
<td>Programming Fundamentals I and Programming Fundamentals II</td>
<td>6</td>
</tr>
</tbody>
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Select six credits of the following: 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 2336</td>
<td>Programming Fundamentals III</td>
<td></td>
</tr>
<tr>
<td>COSC 2325</td>
<td>Computer Organization</td>
<td></td>
</tr>
<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2325 &amp; PHYS 2125</td>
<td>University Physics I (lecture) and University Physics I (lab)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2326 &amp; PHYS 2126</td>
<td>University Physics II (lecture) and University Physics II (lab)</td>
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</tbody>
</table>

**Total Credits** 12

**Code**

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
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</table>

**Institutional Option**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDUC 1300</td>
<td>Learning Framework</td>
<td></td>
</tr>
<tr>
<td>PSYC 1300</td>
<td>Learning Framework</td>
<td></td>
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<tr>
<td>Academic elective (if successfully completed GUST 0305)</td>
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Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
<td></td>
</tr>
<tr>
<td>ITSC 1309</td>
<td>Integrated Software Applications I</td>
<td></td>
</tr>
<tr>
<td>Academic elective (if student passes the computer literacy exam)</td>
<td></td>
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</tr>
</tbody>
</table>

**Communications**

Select two of the following: 6

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I (required)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
<td></td>
</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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</table>

**Mathematics**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
<td></td>
</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences</td>
<td></td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td></td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods (Statistics)</td>
<td></td>
</tr>
<tr>
<td>MATH 2318</td>
<td>Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 2320</td>
<td>Differential Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 2412</td>
<td>Pre-Calculus Math</td>
<td></td>
</tr>
<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
<td></td>
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</table>

**Life and Physical Sciences (Natural Science)**

Select two of the following: 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ASTR 1303</td>
<td>Stars and Galaxies (lecture)</td>
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</tr>
<tr>
<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1306</td>
<td>Biology for Science Majors I (Lecture)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1307</td>
<td>Biology for Science Majors II (Lecture)</td>
<td></td>
</tr>
<tr>
<td>BIOL 1311</td>
<td>General Botany</td>
<td></td>
</tr>
<tr>
<td>BIOL 1313</td>
<td>General Zoology (Lecture)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
<td></td>
</tr>
<tr>
<td>CHEM 1312</td>
<td>General Chemistry II (lecture)</td>
<td></td>
</tr>
<tr>
<td>GEOL 1304</td>
<td>Historical Geology (lecture)</td>
<td></td>
</tr>
<tr>
<td>GEOL 1305</td>
<td>Environmental Science (lecture)</td>
<td></td>
</tr>
<tr>
<td>PHYS 1301</td>
<td>College Physics I (lecture)</td>
<td></td>
</tr>
<tr>
<td>PHYS 1302</td>
<td>College Physics II (lecture)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2325</td>
<td>University Physics I (lecture)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2326</td>
<td>University Physics II (lecture)</td>
<td></td>
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</table>

**Language, Philosophy, and Culture (Humanities)**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGL 2322</td>
<td>British Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 2323</td>
<td>British Literature II</td>
<td></td>
</tr>
<tr>
<td>ENGL 2327</td>
<td>American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 2328</td>
<td>American Literature II</td>
<td></td>
</tr>
<tr>
<td>ENGL 2332</td>
<td>World Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 2333</td>
<td>World Literature II</td>
<td></td>
</tr>
<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
<td></td>
</tr>
<tr>
<td>ENGL 2351</td>
<td>Mexican American Literature</td>
<td></td>
</tr>
<tr>
<td>GEOG 1302</td>
<td>Human Geography</td>
<td></td>
</tr>
<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
<td></td>
</tr>
<tr>
<td>HIST 2322</td>
<td>World Civilization II</td>
<td></td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
<td></td>
</tr>
<tr>
<td>HUMA 1302</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
<td></td>
</tr>
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</table>

**Creative Arts (Fine Arts)**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
<td></td>
</tr>
<tr>
<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
<td></td>
</tr>
<tr>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
<td></td>
</tr>
<tr>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
<td></td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
<td></td>
</tr>
<tr>
<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation I</td>
<td></td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
<td></td>
</tr>
<tr>
<td>MUSI 1307</td>
<td>Music Literature</td>
<td></td>
</tr>
<tr>
<td>MUSI 1310</td>
<td>American Music</td>
<td></td>
</tr>
</tbody>
</table>

**American History**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1301</td>
<td>United States History I</td>
<td></td>
</tr>
<tr>
<td>HIST 1302</td>
<td>United States History II</td>
<td></td>
</tr>
<tr>
<td>HIST 2301</td>
<td>Texas History</td>
<td></td>
</tr>
<tr>
<td>HIST 2327</td>
<td>Mexican American History I</td>
<td></td>
</tr>
<tr>
<td>HIST 2328</td>
<td>Mexican American History II</td>
<td></td>
</tr>
</tbody>
</table>

**Government/Political Science**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution and Topics)</td>
<td></td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government (Texas Constitution and Topics)</td>
<td></td>
</tr>
</tbody>
</table>

**Social and Behavioral Sciences**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2302</td>
<td>Introduction to Archaeology</td>
<td></td>
</tr>
</tbody>
</table>
ANTH 2346  General Anthropology  
ANTH 2351  Cultural Anthropology  
ECON 2301  Principles of Macroeconomics  
ECON 2302  Principles of Microeconomics  
GEOG 1303  World Regional Geography  
GOVT 2304  Introduction to Political Science  
HIST 2311  Western Civilization I  
HIST 2312  Western Civilization II  
PSYC 2301  General Psychology  
SOCI 1301  Introduction to Sociology  
SOCI 2319  Minority Studies I  

Component Area Option  
Select two of the following:  
- SPCH 1311  Introduction to Speech Communication  
- SPCH 1315  Public Speaking  
- SPCH 1318  Interpersonal Communications  
- SPCH 1321  Business and Professional Speech  
- PHED 1164  Introduction to Physical Fitness and Wellness  
- CHIN 1411  Beginning Chinese I  
- CHIN 1412  Beginning Chinese II  
- FREN 1411  Beginning French I  
- FREN 1412  Beginning French II  
- GERM 1411  Beginning German I  
- GERM 1412  Beginning German II  
- SGNL 1401  Beginning American Sign Language I  
- SGNL 1402  Beginning American Sign Language II  
- SPAN 1411  Beginning Spanish I  
- SPAN 1412  Beginning Spanish II  

Total Credits 48

1 MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2 Students must be simultaneously co-enrolled in the co-requisite science lab.

3 Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

4 2 SCH in this option include the labs for science courses.

Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College’s 42-hour core curriculum, that block of courses must be substituted for the receiving institution’s core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

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### Program Information

All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

The engineering design graphics program at San Jacinto College:

- Trains students to translate the ideas of designers, engineers, and architects from rough sketches, design layouts, specifications, and calculations into working drawings, maps, plans, illustrations, and 3D models;
- Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
- Offers degree plans in three areas:
  a. Architectural/Civil/Structural
  b. Mechanical
  c. Petro/Industrial

### Career Opportunities

Growth in Houston’s diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy, and Petrochemical
- Public Works

### Earning Potential

Mechanical drafter median salary: $67,474 per year

San Jacinto College 2018-2019
Engineering Design Graphics (EDG) is a technical field where engineering data is communicated through drawings and three-dimensional models. Drafters provide support to designers, architects and all types of engineers, preparing documentation and creating finished drawings for production in the engineering, construction or manufacturing industries. Drafters translate the ideas of engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations and 3D models which are used in producing marketable products. They prepare drawings and/or 3D models using computer aided drafting, design, and 3D modeling software in the fields of mechanical, petrochemical, architectural, civil and structural.

The EDG department provides several certificate levels and Associate of Applied Science degree options. Working with local industry, courses have been clustered into specialty disciplines which provide concentration in specific areas of study. They include: Architectural/Civil/Structural, Mechanical and Petro/Industrial.

### Plan of Study

**All Campuses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFTG 1305</td>
<td>Technical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFTG 1417</td>
<td>Architectural Drafting-Residential</td>
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</tr>
<tr>
<td>ARCE 1421</td>
<td>Architectural Illustration</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2317</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer Year One Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and Behavioral Sciences</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Third Term</strong></td>
<td></td>
<td></td>
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<tr>
<td>ARCE 1452</td>
<td>Structural Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2421</td>
<td>Topographic Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2428</td>
<td>Architectural Drafting-Commercial</td>
<td>4</td>
</tr>
<tr>
<td>CAPSTONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1332 or MATH 1314</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra</td>
<td>3</td>
</tr>
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</table>

**Fourth Term**

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARCE 1415</td>
<td>Structural Steel Detailing</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2430</td>
<td>Civil Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2431</td>
<td>Advanced Technologies in Architectural Design and Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2386 or DFTG 2338</td>
<td>Internship-Drafting and Design Technology/Technician</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Final Project - Advanced Drafting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer Year Two Term</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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**Capstone Experience:**

Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts), and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after the term in which the last required and elective engineering design graphics courses are completed.

Courses are not required to be taken in any specific order unless a course has a prerequisite. See course catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Associate of applied science degrees in multiple Engineering Design Graphics Specialties will not be awarded.

### Engineering Design Graphics

**Architectural/Civil/Structural Specialty, Certificate of Technology**
Program Information
All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

The engineering design graphics program at San Jacinto College:

- Trains students to translate the ideas of designers, engineers, and architects from rough sketches, design layouts, specifications, and calculations into working drawings, maps, plans, illustrations, and 3D models;
- Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
- Offers degree plans in three areas:
  a. Architectural/Civil/Structural
  b. Mechanical
  c. Petro/Industrial

Career Opportunities
Growth in Houston's diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy, and Petrochemical
- Public Works

Earning Potential
Mechanical drafter median salary: $67,474 per year

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

Capstone Experience: The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Courses do not have to be taken in this order unless a course has a prerequisite. See web catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Certificates in multiple engineering design graphics specialties will not be awarded.
Engineering Design Graphics
Architectural/Civil/Structural Specialty, Level 2 Certificate

Program Information
All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

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- Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
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  b. Mechanical
  c. Petro/Industrial

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- Public Works

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1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

Campuses
Central Campus
North Campus
South Campus

Information
San Jacinto College offers three Level 2 Certificates, including: Architectural/Civil/Structural, Mechanical and Petro/Industrial. The Level 2 Certificate is comprised of 45 semester credit hours of Engineering Design Graphics (EDG) technical coursework, three (3) semester credit hours of mathematics, and three (3) semester credit hours of Speech. This is a fast track award for those wishing to concentrate their studies in EDG and enter the job market as soon as possible.

Plan of Study
All Campuses
5DFT-A

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<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tr>
<td>First Term</td>
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<td>DFTG 1305</td>
<td>Technical Drafting</td>
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<td>ARCE 1421</td>
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<td>ARCE 1452</td>
<td>Structural Drafting</td>
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<td>DFTG 2421</td>
<td>Topographic Drafting</td>
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<td>MATH 1332 or MATH 1314</td>
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<td>Fourth Term</td>
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<td>ARCE 1415</td>
<td>Structural Steel Detailing</td>
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<td>Civil Drafting</td>
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<td>DFTG 2431</td>
<td>Advanced Technologies in Architectural Design and Drafting</td>
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<td>DFTG 2386 or DFTG 2338</td>
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<td></td>
<td>or Final Project - Advanced Drafting</td>
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</table>
Engineering Design Graphics Mechanical Specialty, Associate of Applied Science

**Capstone Experience:** DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during or after, the term in which the last required and elective engineering design graphics course are completed.

Courses may be applied to earn the certificate of technology, then the level 2 certificate, and finally the associate of applied science degree when the courses are in the same specialty discipline.

Courses do not have to be taken in this order, unless a course has a prerequisite. See Catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Level 2 Certificates in multiple engineering design graphics courses will not be awarded.

**Engineering Design Graphics Mechanical Specialty, Associate of Applied Science**

**Career Opportunities**

Growth in Houston's diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy and Petrochemical
- Public Works

**Earning Potential**

Mechanical drafter median salary: $67,474 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

**Campuses**

Central Campus
North Campus
South Campus

**Information**

Engineering Design Graphics (EDG) is a technical field where engineering data is communicated through drawings and three-dimensional models. Drafters provide support to designers, architects and all types of engineers, preparing documentation and creating finished drawings for production in the engineering, construction or manufacturing industries. Drafters translate the ideas of engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations and 3D models which are used in producing marketable products. They prepare drawings and/or 3D models using computer aided drafting, design, and 3D modeling software in the fields of mechanical, petrochemical, architectural, civil and structural.

The EDG department provides several certificate levels and Associate of Applied Science degree options. Working with local industry, courses have been clustered into specialty disciplines which provide concentration in specific areas of study. They include: Architectural/Civil/Structural, Mechanical and Petro/Industrial.

**Plan of Study**

**All Campuses**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
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<td>Technical Drafting</td>
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<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
<td>4</td>
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<tr>
<td>Language, Philosophy, and Culture or Creative Arts</td>
<td>3</td>
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</table>

1 Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017
Engineering Design Graphics
Mechanical Specialty, Certificate of Technology

Program Information
All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

The engineering design graphics program at San Jacinto College:
• Trains students to translate the ideas of designers, engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations, and 3D models;
• Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
• Offers degree plans in three areas:
  a. Architectural/Civil/Structural
  b. Mechanical
  c. Petro/Industrial

Career Opportunities
Growth in Houston's diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:
• Architecture
• Engineering: Electrical, Instrumentation, Structural, Civil
• Manufacturing
• Oil, Energy and Petrochemical
• Public Works

Earning Potential
Mechanical drafter median salary: $67,474 per year

Capstone Experience 2 DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

1 Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of "The Basics" Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.

2 The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required and elective Engineering Design Graphics courses are completed.

Courses may be applied to earn the certificate of technology, then the level 2 certificate, and finally the associate of applied science degree when the courses are in the same specialty discipline.

Courses do not have to be taken in this order unless a course has a prerequisite. See course catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

A.A.S. degrees in multiple engineering design graphics specialties will not be awarded.

ENGL 1301 Composition I 3

Second Term
DFTG 1433 Mechanical Drafting 4
DFTG 1445 Parametric Modeling and Design 4
DFTG 2317 Descriptive Geometry 3
DFTG 2440 Solid Modeling/Design 4

Credits 15

Summer Year One Term
Speech 3

Credits 3

Third Term
DFTG 2402 Machine Drafting 4
DFTG 2406 Machine Design 4
DFTG 2450 Geometric Dimensioning and Tolerancing 4
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) (or higher) 3
or MATH 1314 College Algebra

Credits 15

Fourth Term
DFTG 2435 Advanced Technologies in Mechanical Design and Drafting 4
DFTG 2458 Advanced Machine Design 4
DFTG 2386 or DFTG 2338 Internship-Drafting and Design Technology/Technician 3
or Final Project - Advanced Drafting

Social and Behavioral Sciences 1 3

Credits 14

Total Credits 60
Engineering Design Graphics Mechanical Specialty, Level 2 Certificate

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

Campuses
Central Campus
North Campus
South Campus

Information
A certificate of technology focuses on 41 semester credit hours of technical course work. This is a fast-track award for those wishing to concentrate their studies in engineering design graphics and enter the job market as soon as possible. San Jacinto College offers three certificates of technology, including:

1. Architectural/Civil/Structural,
2. Mechanical and
3. Petro-Industrial.

Plan of Study
All Campuses
4DFT-M

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>DFTG 1305</td>
<td>Technical Drafting</td>
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<td>Parametric Modeling and Design</td>
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<tr>
<td>DFTG 2317</td>
<td>Descriptive Geometry</td>
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<td>DFTG 2440</td>
<td>Solid Modeling/Design</td>
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<td>DFTG 2406</td>
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<tr>
<td>DFTG 2458</td>
<td>Advanced Machine Design</td>
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<tr>
<td>DFTG 2386 or DFTG 2338</td>
<td>Internship-Drafting and Design Technology/Technician or Final Project - Advanced Drafting</td>
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<td>Credits</td>
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<td>Total Credits</td>
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</table>

Capstone Experience: DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required and elective Engineering Design Graphics courses are completed.

Courses do not have to be taken in this order unless a course has a prerequisite. See catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Certificates in multiple engineering design graphics specialties will not be awarded.

Engineering Design Graphics Mechanical Specialty, Level 2 Certificate

Program Information
All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

The engineering design graphics program at San Jacinto College:

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  c. Petro/Industrial

San Jacinto College 2018-2019
Career Opportunities

Growth in Houston’s diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy and Petrochemical
- Public Works

Earning Potential

Mechanical drafter median salary: $67,474 per year

Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

Campuses

Central Campus
North Campus
South Campus

Information

San Jacinto College offers three Level 2 Certificates, including: Architectural/Civil/Structural, Mechanical and Petro/Industrial. The Level 2 Certificate is comprised of 45 semester credit hours of Engineering Design Graphics (EDG) technical coursework, three (3) semester credit hours of mathematics, and three (3) semester credit hours of Speech. This is a fast track award for those wishing to concentrate their studies in EDG and enter the job market as soon as possible.

Plan of Study

All Campuses

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<tr>
<th>Course</th>
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<tr>
<td>First Term</td>
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<tr>
<td>DFTG 1305</td>
<td>Technical Drafting</td>
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<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
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<td>Speech</td>
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<td>DFTG 1433</td>
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<td>DFTG 1445</td>
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<td>DFTG 2440</td>
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<td>Third Term</td>
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<td>DFTG 2402</td>
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<td>DFTG 2406</td>
<td>Machine Design</td>
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<tr>
<td>DFTG 2450</td>
<td>Geometric Dimensioning and Tolerancing</td>
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Math 1332 or Math 1314 Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra 3

Fourth Term

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<td>DFTG 2458</td>
<td>Advanced Machine Design</td>
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<tr>
<td>DFTG 2386 or DFTG 2338</td>
<td>Internship-Drafting and Design Technology/Technician</td>
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<td>Final Project - Advanced Drafting</td>
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Capstone Experience:

The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the Term in which the last required and elective Engineering Design Graphics courses are completed.

Courses may be applied to earn the certificate of technology, then the level 2 certificate, and finally the associate of applied science degree when the courses are in the same specialty discipline.

Courses do not have to be taken in this order unless a course has a prerequisite. See course catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Level 2 certificates in multiple engineering design graphics specialties will not be awarded.

Engineering Design Graphics Petro/Industrial Specialty, Associate of Applied Science

Program Information

All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer-aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between...
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The engineering design graphics program at San Jacinto College:

- Trains students to translate the ideas of designers, engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations, and 3D models;
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  b. Mechanical
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Career Opportunities

Growth in Houston’s diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy and Petrochemical
- Public Works

Earning Potential

Mechanical drafter median salary: $67,474 per year¹

¹ Source: texaswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

Campuses

Central Campus
North Campus
South Campus

Information

Engineering Design Graphics (EDG) is a technical field where engineering data is communicated through drawings and three-dimensional models. Drafters provide support to designers, architects and all types of engineers, preparing documentation and creating finished drawings for production in the engineering, construction or manufacturing industries. Drafters translate the ideas of engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations and 3D models which are used in producing marketable products. They prepare drawings and/or 3D models using computer aided drafting, design, and 3D modeling software in the fields of mechanical, petrochemical, architectural, civil and structural.

The EDG department provides several certificate levels and Associate of Applied Science degree options. Working with local industry, courses have been clustered into specialty disciplines which provide concentration in specific areas of study. They include: Architectural/Civil/Structural, Mechanical and Petro/Industrial.

Plan of Study

3DFT-PI

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<tr>
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<td>ENGL 1301</td>
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Second Term

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<tr>
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<tbody>
<tr>
<td>DFTG 2317</td>
<td>Descriptive Geometry</td>
<td>3</td>
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<tr>
<td>DFTG 2421</td>
<td>Topographic Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2423</td>
<td>Pipe Drafting</td>
<td>4</td>
</tr>
<tr>
<td>Speech</td>
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Summer Year One Term

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<tr>
<td>Social and Behavioral Sciences¹</td>
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Third Term

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<tr>
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<tbody>
<tr>
<td>ARCE 1452</td>
<td>Structural Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2407</td>
<td>Electrical Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2445</td>
<td>Advanced Pipe Drafting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning) (or higher)</td>
<td>3</td>
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<tr>
<td>or MATH 1314</td>
<td>or College Algebra</td>
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Credits      |                                          | 3       |

Fourth Term

<table>
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<tr>
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<tbody>
<tr>
<td>DFTG 2408</td>
<td>Instrumentation Drafting</td>
<td>4</td>
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<td>DFTG 2430</td>
<td>Civil Drafting</td>
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<tr>
<td>DFTG 2457</td>
<td>Advanced Technologies in Pipe Design and Drafting</td>
<td>4</td>
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<tr>
<td>DFTG 2386 or DFTG 2338</td>
<td>Internship-Drafting and Design Technology/Technician²</td>
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<tr>
<td></td>
<td>or Final Project - Advanced Drafting</td>
<td>3</td>
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</table>

Credits      |                                          | 15      |

Total Credits|                                          | 60      |

Capstone Experience:² DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

¹ Courses which satisfy this requirement should be selected from Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts); and Social and Behavioral Sciences listed in these areas of “The Basics” Core Curriculum, which is published under the Educational Programs section of the San Jacinto Community College web catalog.
The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Courses may be applied to earn the certificate of technology, then the level 2 certificate, and finally the associate of applied science degree when the courses are in the same specialty discipline.

Courses do not have to be taken in this order unless a course has a prerequisite. See catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Degrees in multiple engineering design graphics specialties will not be awarded.

## Engineering Design Graphics Petro/Industrial Specialty, Certificate of Technology

### Program Information

All successful projects start with a good plan. For architects, engineering designers, CAD drafters, and builders, that plan comes in the form of working drawings produced by technically talented and well-trained individuals. If you have a desire to express your knowledge through computer aided design software, San Jacinto College can give you the skills you need to make your way into this exciting field. This degree allows you to pursue careers that strike a satisfying balance between creativity, technical proficiency, and attention to detail. You can make yourself an indispensable asset in a variety of fields, such as architecture, manufacturing, engineering, construction, and the oil and gas industry, with a degree in engineering design graphics.

The engineering design graphics program at San Jacinto College:

- Trains students to translate the ideas of designers, engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations, and 3D models;
- Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
- Offers degree plans in three areas:
  - Architectural/Civil/Structural
  - Mechanical
  - Petro/Industrial

### Career Opportunities

Growth in Houston's diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy and Petrochemical
- Public Works

### Earning Potential

Mechanical drafter median salary: $67,474 per year

Source: texasswages.com (http://texaswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

### Campuses

- Central Campus
- North Campus
- South Campus

### Information

A certificate of technology focuses on 41 semester credit hours of technical course work. This is a fast-track award for those wishing to concentrate their studies in engineering design graphics and enter the job market as soon as possible. San Jacinto College offers three certificates of technology, including:

1. Architectural/Civil/Structural,
2. Mechanical and
3. Petro-Industrial.

### Plan of Study

#### All Campuses

<table>
<thead>
<tr>
<th>4DFT-PI</th>
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</table>

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Term</strong></td>
<td></td>
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</tr>
<tr>
<td>DFTG 1305</td>
<td>Technical Drafting</td>
<td>3</td>
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<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Second Term</strong></td>
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<tr>
<td>DFTG 2317</td>
<td>Descriptive Geometry</td>
<td>3</td>
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<tr>
<td>DFTG 2421</td>
<td>Topographic Drafting</td>
<td>4</td>
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<td>DFTG 2423</td>
<td>Pipe Drafting</td>
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<tr>
<td>ARCE 1452</td>
<td>Structural Drafting</td>
<td>4</td>
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<tr>
<td>DFTG 2407</td>
<td>Electrical Drafting</td>
<td>4</td>
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</table>

San Jacinto College 2018-2019
The engineering design graphics program at San Jacinto College:

- Trains students to translate the ideas of designers, engineers and architects from rough sketches, design layouts, specifications and calculations into working drawings, maps, plans, illustrations, and 3D models;
- Offers students the skills needed to prepare technical drawings and/or 3D models using Computer Aided Drafting (CAD), design, and 3D modeling software; and
- Offers degree plans in three areas:
  a. Architectural/Civil/Structural
  b. Mechanical
  c. Petro/Industrial

**Career Opportunities**

Growth in Houston’s diversified job markets has created employment openings for drafters. Career opportunities for drafters are available in:

- Architecture
- Engineering: Electrical, Instrumentation, Structural, Civil
- Manufacturing
- Oil, Energy and Petrochemical
- Public Works

**Earning Potential**

Mechanical drafter median salary: $67,474 per year

1. Source: texasswages.com (http://texasswages.com), Gulf Coast region, 2017

For more information, please contact Central Campus, 281-476-1841; North Campus, 281-998-6150, x 7765; and South Campus, 281-998-6150, x 3587.

**Campuses**

Central Campus
North Campus
South Campus

**Information**

San Jacinto College offers three Level 2 Certificates, including: Architectural/Civil/Structural, Mechanical and Petro/Industrial. The Level 2 Certificate is comprised of 45 semester credit hours of Engineering Design Graphics (EDG) technical coursework, three (3) semester credit hours of mathematics, and three (3) semester credit hours of Speech. This is a fast track award for those wishing to concentrate their studies in EDG and enter the job market as soon as possible.

**Plan of Study**

**All Campuses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Term</td>
<td></td>
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<tr>
<td>DFTG 1305</td>
<td>Technical Drafting</td>
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<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
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<td>Speech</td>
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Credits: 10
Second Term

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>DFTG 2317</td>
<td>Descriptive Geometry</td>
<td>3</td>
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<td>DFTG 2421</td>
<td>Topographic Drafting</td>
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Credits: 11

Third Term

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<th>Course</th>
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<tr>
<td>ARCE 1452</td>
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<td>DFTG 2407</td>
<td>Electrical Drafting</td>
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<tr>
<td>DFTG 2445</td>
<td>Advanced Pipe Drafting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics</td>
<td>3</td>
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<tr>
<td>or MATH 1314</td>
<td>(Quantitative Reasoning) (or higher)</td>
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Credits: 15

Fourth Term

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<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>DFTG 2430</td>
<td>Civil Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2457</td>
<td>Advanced Technologies in Pipe Design and Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2386</td>
<td>Internship-Drafting and Design Technology/Technician</td>
<td>3</td>
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<tr>
<td>or DFTG 2338</td>
<td>or Final Project - Advanced Drafting</td>
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</tbody>
</table>

Credits: 15

Total Credits: 51

**Capstone Experience:**

DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting

The course selected to satisfy the Capstone Experience (DFTG 2386 Internship-Drafting and Design Technology/Technician or DFTG 2338 Final Project - Advanced Drafting) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Courses may be applied to earn the certificate of technology, then the level 2 certificate, and finally the associate of applied science degree when the courses are in the same specialty discipline.

Courses **do not** have to be taken in this order unless a course has a prerequisite. See catalog for descriptions.

For more detailed information on this program, contact the department chair or faculty.

Level 2 Certificates in multiple engineering design graphics specialties **will not** be awarded.

---

### Engineering, Associate of Science in Engineering

**Engineer Your Path to Success**

Everything is engineered. Every building, bridge, highway, pipeline, vehicle, toy, computer, athletic shoe — every manmade object is taken from idea to reality by engineers. San Jacinto College offers an Associate of Science in Engineering that is fully transferrable to Texas public universities and includes courses in physics, chemistry, math and engineering.

With this foundation, you’ll shape the future of space travel, or develop our next great energy source. You may secure the world’s supply of fresh water, or build the next Olympic stadium. An engineering degree gives you unlimited options to pursue ambitious goals and succeed.

An Associate of Science in Engineering Science (A.S.E.) from San Jacinto College:

- promotes maximum **transferability** for students and offers courses based on a particular field of engineering and the institution to which they will transfer;
- helps students develop **skills** for the management of natural resources, environmental restoration, and the design, installation, and improvement of integrated systems of business and manufacturing in a variety of fields;
- and prepares students for **careers** in biomedical engineering, chemical engineering, civil engineering, computer and electrical engineering, industrial engineering, mechanical engineering, petroleum engineering, and more.

**Type:** Academic

### Additional Information

San Jacinto College participates in the Voluntary Mechanical Engineering Transfer Compact. The Transfer Compact represents 77 percent of the Texas public universities offering mechanical engineering and 75 percent of the Texas public community or technical colleges offering lower-division engineering courses. The compact guarantees transfer credit for community college students accepted into university mechanical engineering programs.

In order to transfer to a four-year institution students must meet any and all entrance requirements of the receiving institution, including grade point averages and/or testing requirements.

### Career Opportunities

Graduates of this program are prepared to become engineering professionals working in a wide range of fields such as designing water...
systems, highways, manufacturing systems, piping systems for chemical plants, bridges, computers and even toy making.

Earning Potential

Chemical engineer - $129,153

Environmental engineer - $113,675

Mechanical engineer - $99,721

Civil engineer - $104,770

1 Source: www.texaswages.com (https://publications.sanjac.edu/areas-study/science-technology-engineering-math/engineering-as/www.texaswages.com) annual median salary, Gulf Coast, 2017

The Associate of Science in Engineering is a Texas Higher Education Coordinating Board-approved collegiate degree consisting of lower-division courses intended for transfer to baccalaureate programs that lead to an engineering degree. The Associate of Science in Engineering, as defined by THECB, is fully transferrable to Texas public universities, which participate in the Tuning In Texas articulation agreement (transfer compact).

It is recommended students seek the advice of an educational planner. Students who complete the Associate of Science in Engineering, will be required to meet any and all entrance requirements of the receiving institution, including grade point averages and/or testing requirements.

All Campuses

2ENGINEER

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<td>MATH 2413</td>
<td>Calculus I (020)</td>
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<tr>
<td>CHEM 1311</td>
<td>General Chemistry I (lecture) and General Chemistry I (lab (030, 090)</td>
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<tr>
<td>ENGR 1201</td>
<td>Introduction to Engineering</td>
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<tr>
<td>EDUC/PSYC 1300</td>
<td>Learning Framework</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I (010)</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td>16</td>
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<tr>
<td><strong>Second Term</strong></td>
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<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
<td>4</td>
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<tr>
<td>PHYS 2325</td>
<td>University Physics I (lecture) and University Physics I (lab (030, 090)</td>
<td>4</td>
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<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution and Topics) (070)</td>
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<tr>
<td>ENGL 2311 or ENGL 1302</td>
<td>Technical and Business Writing (recommended (010)) or Composition II</td>
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<tr>
<td>CHEM 1312 or CHEM 1112 or ENGR 1304</td>
<td>General Chemistry II (lecture) or Engineering Graphics I</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Third Term</strong></td>
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<td>MATH 2415</td>
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<td>PHYS 2326</td>
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<td>ENGR 2304</td>
<td>Programming for Engineers</td>
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</table>

1 This course meets the computer literacy requirement for engineering science degree.

As with all transfer degrees, students should contact the upper-level institution regarding baccalaureate degree requirements. The educational planners and academic advisors can assist with this.

Life Sciences, Associate of Science

The associate of science degree (A.S.) is designed for students who plan to transfer to a four-year or upper-level college or university and major in mathematics, one of the sciences (biology, chemistry, geology, physics, biotechnology or related field), engineering or computer science. (See the Core Curriculum and Field of Study sections.) The associate of science degree differs from an associate of arts degree in the amount or level of mathematics and science required for degree completion. A minimum of 12 hours of mathematics, 12 hours in science, or 12 hours in computer sciences beyond the core requirement will be required for the degree. Please note the Field of Study associate of science degree options contain state-required courses recommended for the degree.

Students seeking an associate of science degree should take science courses designed for majors rather than courses for non-majors. Science courses designed for allied health students are not intended for academic transfer towards a science major.
Students choosing to pursue an associate of science degree should select from among life science, physical science, computer science or mathematics. However, courses designed for non-majors (BIOL 1308 Biology for Non-Science Majors I (Lecture)/BIOL 1108 Biology for Non-Science Majors I (lab), BIOL 1309 Biology for Non-Science Majors II (Lecture)/BIOL 1109 Biology for Non-Science Majors II (lab), and CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)) do not apply to an A.S. degree. They are recommended for the associate of arts degrees.

All Campuses
2LIFESCI

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<td>1 Except BIOL 1308 Biology for Non-Science Majors I (Lecture)/BIOL 1108 Biology for Non-Science Majors I (lab) and BIOL 1309 Biology for Non-Science Majors II (Lecture)/BIOL 1109 Biology for Non-Science Majors II (lab); CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)</td>
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<td>PSYC 1300 Learning Framework</td>
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<td>BCIS 1305 Business Computer Applications</td>
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<td>ITSC 1309 Integrated Software Applications I</td>
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<td>Select one of the following:</td>
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<td>MATH 1314 College Algebra</td>
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<td>MATH 1316 Plane Trigonometry</td>
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<td>MATH 1324 Mathematics for Business and Social Sciences</td>
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<td>MATH 1325 Calculus for Business and Social Sciences</td>
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<td>MATH 2318 Linear Algebra</td>
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<td>MATH 2412 Pre-Calculus Math</td>
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<td>MATH 2413 Calculus I</td>
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<td>ASTR 1304 The Solar System (lecture)</td>
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<td>BIOL 1307 Biology for Science Majors II (Lecture)</td>
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<td>BIOL 1311 General Botany</td>
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Mathematics, Associate of Science

GOVT 2306  Texas Government (Texas Constitution and Topics)  3

Social and Behavioral Sciences
Select one of the following:  3
  ANTH 2302  Introduction to Archaeology
  ANTH 2346  General Anthropology
  ANTH 2351  Cultural Anthropology
  ECON 2301  Principles of Macroeconomics
  ECON 2302  Principles of Microeconomics
  GEOG 1303  World Regional Geography
  GOVT 2304  Introduction to Political Science
  HIST 2311  Western Civilization I
  HIST 2312  Western Civilization II
  PSYC 2301  General Psychology
  SOCI 1301  Introduction to Sociology
  SOCI 2319  Minority Studies I

Component Area Option
Select two of the following:  6
  SPCH 1311  Introduction to Speech Communication
  SPCH 1315  Public Speaking
  SPCH 1318  Interpersonal Communications
  SPCH 1321  Business and Professional Speech
  PHED 1164  Introduction to Physical Fitness and Wellness
  CHIN 1411  Beginning Chinese I
  CHIN 1412  Beginning Chinese II
  FREN 1411  Beginning French I
  FREN 1412  Beginning French II
  GERM 1411  Beginning German I
  GERM 1412  Beginning German II
  SGNL 1401  Beginning American Sign Language I
  SGNL 1402  Beginning American Sign Language II
  SPAN 1411  Beginning Spanish I
  SPAN 1412  Beginning Spanish II

Total Credits  48

1  MATH 1324  Mathematics for Business and Social Sciences,  
   MATH 1325  Calculus for Business and Social Sciences, and MATH 1332  
   Contemporary Mathematics (Quantitative Reasoning) are not  
   recommended for students pursuing mathematics or science.

2  Students must be simultaneously co-enrolled in the co-requisite  
   science lab.

3  Students who have taken GOVT 2301 or GOVT 2302, but not both, should  
   check with an educational planner on how to complete the 6 SCH.

4  2 SCH in this option include the labs for science courses.

Other courses that may be used in this component may include any core  
curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College’s 42-hour core  
curriculum, that block of courses must be submitted for the receiving  
institution’s core curriculum. A student may not be required to take  
additional core curriculum courses to meet the requirements of the core.  
Students who transfer without completing the core curriculum shall  
receive academic credit in the core curriculum of the receiving institution  
for each of the courses that the student has successfully completed in  
the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet  
baccalaureate degree requirements at the four-year institution.

Mathematics, Associate of Science

A Foundation in Math Opens Many Doors
Mathematics is fundamental to many fields of study and professions –  
everything from auto repair to astrophysics uses mathematics. Whether  
you are planning a career in engineering, one of the sciences, information  
technology, business, finance, medicine, industry or education, a strong  
mathematics foundation can be your ladder to success.

At San Jacinto College, we have small classes taught by experienced  
professors who are dedicated to our students’ mastery of mathematics.  
Upon graduation, you will be ready for entry into a wide variety of four-  
year degree mathematics programs or for immediate entry into one of  
many technical fields.

Career Opportunities
Students pursuing a bachelor’s degree pathway in mathematics will be  
prepared for careers as:

- Accountants $88,921
- Actuaries $109,711
- Cost estimators $77,746
- Financial Managers $164,390
- Insurance Underwriters $66,514
- Mathematicians $43,269
- Operations Research Analysts $93,517
- Real Estate Appraisers $64,435
- Secondary teachers $61,844
- Statistician $78,542
- Survey Researchers $64,211

1  Source: www.texaswages.com, 2017 annual median salaries for Gulf  
   Coast region

The associate of science degree (A.S.) is designed for students who  
plan to transfer to a four-year or upper-level college or university and  
major in mathematics, one of the sciences (biology, chemistry, geology,  
physics, biotechnology or related field), engineering or computer science.  
(See the Core Curriculum and Field of Study sections.) The associate of  
science degree differs from an associate of arts degree in the amount
or level of mathematics and science required for degree completion. A minimum of 12 hours of mathematics, 12 hours in science, or 12 hours in computer sciences beyond the core requirement will be required for the degree. Please note the Field of Study associate of science degree options contain state-required courses recommended for the degree.

Students seeking an associate of science degree should take science courses designed for majors rather than courses for non-majors. Science courses designed for allied health students are not intended for academic transfer towards a science major.

Students choosing to pursue an associate of science degree should select from among life science, physical science, computer science or mathematics. However, courses designed for non-majors (BIOL 1308 Biology for Non-Science Majors I (Lecture)/BIOL 1108 Biology for Non-Science Majors I (lab), BIOL 1309 Biology for Non-Science Majors II (Lecture)/BIOL 1109 Biology for Non-Science Majors II (lab), and CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)) do not apply to an A.S. degree. They are recommended for the associate of arts degrees.

All Campuses

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**Component Area Option**

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</table>

**Total Credits**: 48

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1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

4. 2 SCH in this option include the labs for science courses.

Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

---

**Physical Sciences, Associate of Science**

The associate of science degree (A.S.) is designed for students who plan to transfer to a four-year or upper-level college or university and major in mathematics, one of the sciences (biology, chemistry, geology, physics, biotechnology or related field), engineering or computer science. (See the Core Curriculum and Field of Study sections.) The associate of science degree differs from an associate of arts degree in the amount or level of mathematics and science required for degree completion. A minimum of 12 hours of mathematics, 12 hours in science, or 12 hours in computer sciences beyond the core requirement will be required for the degree. Please note the Field of Study associate of science degree options contain state-required courses recommended for the degree.

Students seeking an associate of science degree should take science courses designed for majors rather than courses for non-majors. Science courses designed for allied health students are not intended for academic transfer towards a science major.

Students choosing to pursue an associate of science degree should select from among life science, physical science, computer science or mathematics. However, courses designed for non-majors (BIOL 1308 Biology for Non-Science Majors I (Lecture)/BIOL 1108 Biology for Non-Science Majors I (lab), BIOL 1309 Biology for Non-Science Majors II (Lecture)/BIOL 1109 Biology for Non-Science Majors II (lab), and CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)) do not apply to an A.S. degree. They are recommended for the associate of arts degrees.

**All Campuses**

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<td><strong>ASTR 1304</strong> The Solar System (lecture)</td>
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<td><strong>ARTS 1303</strong> Art History I (Prehistoric to the 14th century)</td>
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<td><strong>ARTS 1304</strong> Art History II (14th century to the present)</td>
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<td><strong>DANC 2303</strong> Dance Appreciation</td>
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<td><strong>DRAM 1310</strong> Introduction to Theatre</td>
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<td><strong>DRAM 2366</strong> Introduction to Cinema: Film Appreciation I</td>
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<td><strong>HIST 2327</strong> Mexican American History I</td>
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<td><strong>Government/Political Science</strong></td>
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<td><strong>GOVT 2305</strong> Federal Government (Federal Constitution and Topics)</td>
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<td><strong>GOVT 2306</strong> Texas Government (Texas Constitution and Topics)</td>
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**Component Area Option**

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<td>SPCH 1315</td>
<td>Public Speaking</td>
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**Total Credits**: 48

1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

4. 2 SCH in this option include the labs for science courses.

Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.
SOCIAL AND BEHAVIORAL SCIENCE

- General Studies, Associate of Arts
- Social and Behavioral Sciences, Associate of Arts

General Studies, Associate of Arts

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major. Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

All Campuses

1G-STUD

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Communications

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<td>ENGL 1302</td>
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Mathematics

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Life and Physical Sciences (Natural Science)

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<td>Art History II (14th century to the present)</td>
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<td>HIST 2301</td>
<td>Texas History</td>
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<td>Mexican American History I</td>
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<td>SPCH 1315</td>
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<td>Interpersonal Communications</td>
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<td>SPCH 1321</td>
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<td>Introduction to Physical Fitness and Wellness</td>
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1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.
2. Students must be simultaneously co-enrolled in the co-requisite science lab.
3. MATH 1342 is required for a bachelor’s degree in nursing.
4. BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.
5. BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.
6. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.
7. 2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College’s 42-hour core curriculum, that block of courses must be substituted for the receiving institution’s core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution.
for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

Social and Behavioral Sciences, Associate of Arts

Understanding the “why”

A degree within the social and behavioral sciences allows you to study the “why” behind complex thought processes, learned behaviors, ancient and modern cultural differences, political science and philosophical reasoning.

Students will learn to thoroughly examine and apply their own interpretations using the theories and research these courses have to offer. The critical thinking, theory application and social observation skills learned in social and behavioral science courses can be applied to a number of outside courses, making a degree in social and behavioral sciences an excellent foundation to a number of disciplines.

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major. Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

All Campuses
1SOC-BEHV

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<td>Academic elective (if student passes the computer literacy exam)</td>
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**Language, Philosophy, and Culture (Humanities)**

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<tr>
<td>GEOG 1302</td>
<td>Human Geography</td>
</tr>
<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
</tr>
<tr>
<td>HIST 2322</td>
<td>World Civilization II</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities I</td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
</tr>
</tbody>
</table>

**Creative Arts (Fine Arts)**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ARTS 1303</td>
<td>Art History I (Prehistoric to the 14th century)</td>
</tr>
<tr>
<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
</tr>
<tr>
<td>DANC 2303</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
</tr>
<tr>
<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation I</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>MUSI 1307</td>
<td>Music Literature</td>
</tr>
<tr>
<td>MUSI 1310</td>
<td>American Music</td>
</tr>
</tbody>
</table>

**American History**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIST 1301</td>
<td>United States History I</td>
</tr>
<tr>
<td>HIST 1302</td>
<td>United States History II</td>
</tr>
<tr>
<td>HIST 2301</td>
<td>Texas History</td>
</tr>
<tr>
<td>HIST 2327</td>
<td>Mexican American History I</td>
</tr>
<tr>
<td>HIST 2328</td>
<td>Mexican American History II</td>
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</tbody>
</table>

**Government/Political Science**

Select two of the following: 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution and Topics)</td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government (Texas Constitution and Topics)</td>
</tr>
</tbody>
</table>

**Social and Behavioral Sciences**

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANTH 2302</td>
<td>Introduction to Archaeology</td>
</tr>
<tr>
<td>ANTH 2346</td>
<td>General Anthropology</td>
</tr>
<tr>
<td>ANTH 2351</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>GEOG 1303</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>GOVT 2304</td>
<td>Introduction to Political Science</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HIST 2312</td>
<td>Western Civilization II</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
</tr>
<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOCI 2319</td>
<td>Minority Studies I</td>
</tr>
</tbody>
</table>

**Component Area Option**

Select two of the following: 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
</tr>
<tr>
<td>PHED 1164</td>
<td>Introduction to Physical Fitness and Wellness</td>
</tr>
<tr>
<td>CHIN 1411</td>
<td>Beginning Chinese I</td>
</tr>
<tr>
<td>CHIN 1412</td>
<td>Beginning Chinese II</td>
</tr>
<tr>
<td>FREN 1411</td>
<td>Beginning French I</td>
</tr>
<tr>
<td>FREN 1412</td>
<td>Beginning French II</td>
</tr>
<tr>
<td>GERM 1411</td>
<td>Beginning German I</td>
</tr>
<tr>
<td>GERM 1412</td>
<td>Beginning German II</td>
</tr>
<tr>
<td>SGNL 1401</td>
<td>Beginning American Sign Language I</td>
</tr>
<tr>
<td>SGNL 1402</td>
<td>Beginning American Sign Language II</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish I</td>
</tr>
<tr>
<td>SPAN 1412</td>
<td>Beginning Spanish II</td>
</tr>
</tbody>
</table>

Total Credits 48

1. MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2. Students must be simultaneously co-enrolled in the co-requisite science lab.

3. MATH 1342 is required for a bachelor's degree in nursing.

4. BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.

5. BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.

6. Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

7. 2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.
Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.
No results found, please try again. Reset selections.

- Accounting, Associate of Applied Science 2 years Degree Career / Technical Business Math / Science Conventional
- Accounting, Level 2 Certificate Certificate 1 - 2 years Degree Career / Technical Business Math / Science Conventional
- Art and Design, Associate of Applied Science Degree 2 years Degree Career / Technical Creative Arts Artistic Enterprising
- Art and Design, Certificate of Technology Certificate 1 - 2 years Degree Career / Technical Creative Arts Artistic Enterprising
- Art and Design, Occupational Certificate Certificate 6 months - 1 year Career / Technical Creative Arts Artistic Enterprising
- Art, Commercial Art
- Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Level 2 Certificate Certificate 1 - 2 years Career / Technical Transportation Realistic
- Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Level 2 Certificate of Technology Certificate 1 - 2 years Career / Technical Transportation Realistic
- Auto Tech, General Motors Automotive Service Educational Program (ASEP), Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Associate of Applied Science Degree 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Level 2 Certificate Certificate 1 - 2 years Career / Technical Transportation Realistic
- Auto Tech, Mopar College Automotive Program (CAP), Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Mopar College Automotive Program (CAP), Level 2 Certificate of Technology Certificate 1 - 2 years Career / Technical Transportation Realistic
- Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Level 2 Certificate Certificate 1 - 2 years Career / Technical Transportation Realistic
- Automotive Collision Repair Technology Management Specialty, Associate of Applied Science 2 years Degree Career / Technical Business Transportation Realistic
- Automotive Collision Repair Technology Management Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Transportation Realistic
- Automotive Collision Repair Technology, Associate of Applied Science 2 years Degree Career / Technical Transportation Realistic
- Automotive Collision Repair, Certificate of Technology Certificate 1 - 2 years Career / Technical Transportation Realistic
- Automotive Collision, Automotive Painting Specialty, Occupational Certificate Certificate 6 months - 1 year Career / Technical Transportation Realistic
- Automotive Collision, Non-Collision Repair, Certificate of Technology Certificate 1 - 2 years Career / Technical Transportation Realistic
- Biomedical Clinical Equipment Technician, Associate of Applied Science 2 years Degree Career / Technical Computers Health / Medical Investigative Realistic
- Biomedical Clinical Equipment Technician, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Health / Medical Investigative Realistic
- Biomedical Clinical Equipment Technician, Level 2 Certificate Certificate 1 - 2 years Career / Technical Computers Health / Medical Investigative Realistic
- Biomedical Clinical Equipment Technician, Occupational Certificate Certificate 6 months - 1 year Career / Technical Computers Health / Medical Investigative Realistic
- Business Management - Entrepreneur, Associate of Applied Science 2 years Degree Career / Technical Business Conventional Enterprising Social
- Business Management - Retail Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Conventional Enterprising Social
- Business Management, Associate of Applied Science 2 years Degree Career / Technical Business Conventional Enterprising Social
• Business Management, Occupational Certificate 6 months - 1 year
  Career / Technical Business Conventional Enterprising Social

• Business Marketing Foundations of Marketing Specialty, Occupational Certificate 6 months - 1 year
  Career / Technical Business Conventional Enterprising

• Business, Administrative Assistant, Certificate of Technology 1 - 2 years
  Career / Technical Business Conventional Enterprising

• Business, Associate of Arts University Transfer 2 years
  Degree Business Conventional Enterprising Social

• Business, Executive Administrative Assistant, Associate of Applied Science 2 years
  Degree Career / Technical Business Conventional Enterprising

• Business, Management Specialty, Certificate of Technology 1 - 2 years
  Career / Technical Business Conventional Enterprising

• Business, Medical Office Support, Enhanced Skills Certificate 6 months or less
  Degree Required Career / Technical Business Health / Medical Conventional

• Business, Office Assistant, Occupational Certificate 6 months - 1 year
  Career / Technical Business Conventional Enterprising

• Child Development, Associate Training for Director, Occupational Certificate 6 months - 1 year
  Career / Technical Education Enterprising Social

• Child Development / Early Childhood Education, Associate of Applied Science 2 years
  Degree Career / Technical Education Artistic Social

• Child Development / Early Childhood Education, Certificate of Technology 1 - 2 years
  Career / Technical Education Artistic Social

• CIT, Advanced Information Technology Security Specialty, Occupational Certificate 6 months - 1 year
  Career / Technical Computers Conventional Investigative Realistic

• CIT, Applications Programming Specialty, Associate of Applied Science 2 years
  Career / Technical Computers Conventional Investigative

• CIT, Applications Programming, Certificate of Technology 1 - 2 years
  Career / Technical Computers Conventional Investigative

• CIT, Applied Computer Electronics Technology

• CIT, Beginning Network Administration Cisco Specialty, Occupational Certificate 6 months - 1 year
  Career / Technical Computers Conventional Enterprise Investigative Realistic

• CIT, Computer Information Technology Foundations, Occupational Certificate 6 months - 1 year
  Career / Technical Computers Conventional Investigative Realistic

• CIT, Desktop Support and Microsoft Network Administration, Associate of Applied Science 2 years
  Degree Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Desktop Support and Microsoft Network Administration, Certificate of Technology 1 - 2 years
  Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Information Technology Security Specialty, Associate of Applied Science 2 years
  Degree Career / Technical Computers Conventional Investigative Realistic

• CIT, Information Technology Security Specialty, Certificate of Technology 1 - 2 years
  Career / Technical Computers Conventional Investigative Realistic

• CIT, Introductory Game Design and Development, Occupational Certificate 6 months - 1 year
  Career / Technical Computers Conventional Investigative

• CIT, Network Administration Cisco Specialty, Associate of Applied Science 2 years
  Degree Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Network Administration Cisco Specialty, Certificate of Technology 1 - 2 years
  Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Simulation and Game Design, Associate of Applied Science 2 years
  Degree Career / Technical Computers Conventional Investigative

• CIT, Simulation and Game Design, Level 2 Certificate 1 - 2 years
  Career / Technical Computers Conventional Investigative

• CIT, Web Applications Development Specialty, Associate of Applied Science 2 years
  Degree Career / Technical Computers Artistic Conventional Investigative Realistic

• CIT, Web Applications Development Specialty, Certificate of Technology 1 - 2 years
  Career / Technical Computers Artistic Conventional Investigative Realistic

• CIT, Web Page Design and Implementation Specialty, Certificate of Technology 1 - 2 years
  Career / Technical Computers Artistic Conventional Investigative Realistic

• Communications, Associate of Applied Science University Transfer 2 years
  Degree Liberal Arts Artistic Enterprise Investigative Social

• Computer Science, Associate of Science University Transfer 2 years
  Degree Computers Conventional Investigative

• Construction Management, Associate of Applied Science 2 years
  Degree Career / Technical Construction Repair Conventional Enterprise Investigative Realistic

• Construction Management, Certificate of Technology 1 - 2 years
  Career / Technical Construction Repair Conventional Enterprise Investigative Realistic

• Cosmetology High School Operator Dual Credit, Certificate of Technology 1 - 2 years
  Career / Technical Consumer Services Artistic Enterprise Social Realistic
• Cosmetology Instructor, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Education Artistic Enterprising Social Realistic

• Cosmetology Instructor, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Education Artistic Enterprising Social Realistic

• Cosmetology Instructor, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Education Artistic Enterprising Social Realistic

• Cosmetology Operator, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Artistic Enterprising Social Realistic

• Cosmetology Operator, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Artistic Enterprising Social Realistic

• Cosmetology, Facial Specialist (Esthetician), Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Education Artistic Conventional Enterprising Social Realistic

• Cosmetology, Nail Technician, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Education Artistic Conventional Enterprising Social Realistic

• Criminal Justice Core, Occupational Certificate Certificate 6 months - 1 year Career / Technical Law Enterprising Social Realistic

• Criminal Justice, Associate of Applied Science 2 years Degree Career / Technical Law Enterprising Social Realistic

• Criminal Justice, Certificate of Technology Certificate 1 - 2 years Career / Technical Law Enterprising Social Realistic

• Criminal Justice, Level 2 Certificate of Technology Certificate 1 - 2 years Career / Technical Law Enterprising Social Realistic

• Culinary Arts - Chef Training/Restaurant Management, Occupational Certificate Certificate 6 months - 1 year Career / Technical Business Consumer Services Conventional Enterprising Social Realistic

• Culinary Arts - Pastry Chef Specialty, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Enterprising Realistic

• Culinary Arts - Pastry Chef Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Realistic

• Culinary Arts, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Enterprising Realistic

• Culinary Arts, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Realistic

• Culinary, Restaurant Management Career / Technical Business Consumer Services Conventional Enterprising Social Realistic

• Culinary, Restaurant Management, Associate of Applied Science 2 years Degree Career / Technical Business Consumer Services Conventional Enterprising Social Realistic

• Culinary, Restaurant Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Consumer Services Conventional Enterprising Social Realistic

• Diesel Tech, Heavy Diesel Power Specialty, Associate of Applied Science 2 years Degree Career / Technical Construction Repair/Industrial Services Transportation Realistic

• Diesel Tech, Heavy Diesel Power Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair/Industrial Services Transportation Realistic

• Diesel Tech, Heavy Diesel Truck, Associate of Applied Science 2 years Degree Career / Technical Construction Repair/Industrial Services Transportation Realistic

• Diesel Tech, Heavy Diesel Truck, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair/Industrial Services Transportation Realistic

• Dietetics, Food Service Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Investigative Social Realistic

• Dietetics, School Food Service Specialty, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Enterprising Investigative Social Realistic

• Electrical Technology Communications and Alternative Energy, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electrical Technology, Associate of Applied Science 2 years Degree Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electrical Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electrical Technology, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electrical Technology, Level 2 Certificate Certificate 1 - 2 years Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electrical Technology, Occupational Certificate Certificate 6 months - 1 year Career / Technical Construction Repair/Industrial Services Investigative Realistic

• Electronics Technology, Associate of Applied Science 2 years Degree Career / Technical Computers Investigative Realistic

• Electronics Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Investigative Realistic

• Electronics Technology, Level 2 Certificate Certificate 1 - 2 years Career / Technical Computers Investigative Realistic
• Global Logistics and Supply Chain Management, Associate of Science in Engineering University Transfer
• Engineering Design Graphics Architectural/Civil/Structural Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Engineering Industrial Services Conventional Realistic
• Engineering Design Graphics Architectural/Civil/Structural Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Engineering Industrial Services Conventional Realistic
• Engineering Design Graphics Mechanical Specialty, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Engineering Industrial Services Conventional Investigative Realistic
• Engineering Design Graphics Mechanical Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Engineering Industrial Services Conventional Investigative Realistic
• Engineering Design Graphics Mechanical Specialty, Level 2 Certificate Certificate 1 - 2 years Career / Technical Construction Repair Engineering Industrial Services Conventional Investigative Realistic
• Engineering Design Graphics Petro/Industrial Specialty, Associate of Applied Science 2 years Degree Construction Repair Engineering Industrial Services Conventional Investigative Realistic
• Engineering Design Graphics Petro/Industrial Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Engineering Industrial Services Conventional Investigative Realistic
• Engineering, Associate of Science in Engineering University Transfer 2 years Degree Engineering Conventional Investigative Realistic
• Environmental Health and Safety Technology, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Industrial Services Public Safety Enterprise Investigative Social
• Environmental Health and Safety Technology, Certificate Certificate 1 - 2 years Career / Technical Health / Medical Industrial Services Public Safety Enterprise Investigative Social
• Eye Care Technology, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Conventional Enterprise Investigative Realistic
• Eye Care Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Health / Medical Conventional Enterprise Investigative Realistic
• Eye Care, Optician Preparatory, Occupational Certificate Certificate 1 - 2 years Career / Technical Health / Medical Conventional Enterprise Investigative Realistic
• Fine Arts, Associate of Arts University Transfer 2 years Degree Career / Technical Health / Medical Conventional Enterprise Investigative Artistic
• Fire Protection, Chief Officer, Enhanced Skills Certificate Previous Degree Required Certificate 1 - 2 years Career / Technical Public Safety Social Realistic
• Firefighting, Associate of Applied Science 2 years Degree Career / Technical Public Safety Social Realistic
• Firefighting, Certificate of Technology Certificate 1 - 2 years Career / Technical Public Safety Social Realistic
• General Studies, Associate of Arts University Transfer 2 years Degree Education Liberal Arts Social / Behavioral Sciences Artistic Conventional Enterprise Investigative Social Realistic
• Global Logistics and Supply Chain Management, Associate of Applied Science 2 years Degree Career / Technical Business Transportation Conventional Enterprise
• Global Logistics and Supply Chain Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Transportation Conventional Enterprise
• Health Information Management, Associate of Applied Science 2 years Degree Career / Technical Business Health / Medical Conventional
• Health Information Mgmt, Cancer Data Management Specialty, Associate of Applied Science 2 years Degree Career / Technical Business Health / Medical Conventional
• Health Information Mgmt, Cancer Data Management, Advanced Technical Certificate Previous Degree Required Certificate 1 - 2 years Career / Technical Business Health / Medical Conventional
• Health Information Mgmt, Medical Billing, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Health / Medical Conventional
• Health Information Mgmt, Medical Coding Specialist, Level 2 Certificate Certificate 1 - 2 years Career / Technical Business Health / Medical Conventional
• Health Science Medical Assisting Pathway, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Conventional Social
• Health Science Pharmacy Technician Pathway, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Conventional Realistic
• Health Science Vocational Nursing Pathway, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Social
• HVAC, Commercial Air Conditioning Technology, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Industrial Services Realistic
• HVAC, Commercial Air Conditioning Technology, Certificate of TechnologyCertificate1 - 2 yearsCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• HVAC, Commercial Air Conditioning Technology, Level 2 CertificateCertificate1 - 2 yearsCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• HVAC, Commercial Air Conditioning Technology, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• HVAC, Residential Air Conditioning Technology Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• HVAC, Residential Air Conditioning Technology, Associate of Applied Science2 yearsDegreeCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• HVAC, Residential Air Conditioning Technology, Certificate of TechnologyCertificate1 - 2 yearsCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• Instrumentation Technology, Associate of Applied ScienceCertificate3 yearsDegreeCareer / TechnicalConstruction RepairIndustrial ServicesRealistic

• Instrumentation Technology, Enhanced Skills CertificatePrevious Degree RequiredCertificate6 months - 1 yearCareer / TechnicalConstruction RepairIndustrial ServicesConventionalInvestigativeRealistic

• Instrumentation Technology, Level 2 CertificateCertificate1 - 2 yearsCareer / TechnicalConstruction RepairIndustrial ServicesConventionalInvestigativeRealistic

• Interior Design, Associate of Applied Science2 yearsDegreeCareer / TechnicalConstruction RepairIndustrial ServicesCreativeArtsArtisticEnterprising

• Interior Design, Pre-Professional Level 2 CertificateCertificate1 - 2 yearsCareer / TechnicalConstruction RepairIndustrial ServicesCreativeArtsArtisticEnterprising

• Kinesiology, Associate of ArtsUniversity Transfer2 yearsDegreeHealth / MedicalEnterprisingInvestigativeRealistic

• Life Sciences, Associate of ScienceUniversity Transfer2 yearsDegreeMath / ScienceConventionalInvestigativeRealistic

• Long Term Care Administration, Advanced Technical CertificatePrevious Degree Required1 - 2 yearsDegreeCareer / TechnicalBusinessHealth / MedicalConventionalEnterprisingSocial

• Maritime Transportation, Associate of Applied Science2 yearsDegreeCareer / TechnicalTransportationConventionalEnterprisingInvestigativeRealistic

• Maritime, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalTransportationConventionalEnterprisingInvestigativeRealistic

• Massage Therapy, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalConstruction RepairIndustrial ServicesHealth / MedicalConventionalSocial

• Mathematics, Associate of ScienceUniversity Transfer2 yearsDegreeMath / ScienceConventionalInvestigativeRealistic

• Medical Assisting, Certificate of TechnologyCertificate1 - 2 yearsCareer / TechnicalHealth / MedicalConventionalSocial

• Medical Imaging, Computed Tomography, Enhanced Skills CertificatePrevious Degree RequiredCertificate6 months or lessCareer / TechnicalHealth / MedicalConventionalInvestigativeRealistic

• Medical Imaging, Diagnostic Medical Sonography, Associate of Applied Science2 yearsDegreeCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Imaging, Invasive Cardiovascular Technology, Advanced Technical CertificatePrevious Degree RequiredCertificate1 - 2 yearsCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Imaging, Invasive Cardiovascular Technology, Associate of Applied Science2 yearsDegreeCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Imaging, Magnetic Resonance Imaging, Advanced Technical CertificatePrevious Degree RequiredCertificate6 months or lessCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Imaging, Mammography, Enhanced Skills CertificatePrevious Degree RequiredCertificate6 months or lessCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Laboratory Technology, Associate of Applied Science2 yearsDegreeCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Laboratory Technology, Microscopic Tissue Anatomy, Advanced Technical CertificatePrevious Degree RequiredCertificate6 months - 1 yearCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Medical Laboratory Technology, Associate of Applied Science2 yearsDegreeCareer / TechnicalHealth / MedicalInvestigativeRealistic

• Mental Health Clinical and Counseling Psychology, Associate of Applied Science2 yearsDegreeCareer / TechnicalHealth / MedicalInvestigativeSocial

• Mental Health Technician, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalHealth / MedicalInvestigativeSocial

• Mental Health, Substance Abuse Counseling, Level 2 CertificateCertificate1 - 2 yearsCareer / TechnicalHealth / MedicalInvestigativeSocial

• Mental Health, Substance Abuse Prevention Specialist, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalHealth / MedicalInvestigativeSocial

• Mental Health-Substance Abuse Counseling, Occupational CertificateCertificate6 months - 1 yearCareer / TechnicalHealth / MedicalInvestigativeSocial

• Music Recording, Associate of Applied Science2 yearsDegreeCareer / TechnicalComputersCreativeArtsArtisticRealistic

• Music, Associate of Arts in MusicUniversity Transfer2 yearsDegreeCreativeArtsArtistic

• Music, Audio Engineering
- Music, Broadcast Audio Technology, Certificate of TechnologyCertificate1 - 2 years Career / Technical ComputersCreative ArtsEngineeringArtisticRealistic
- Music, Sound Recording, Occupational CertificateCertificate6 months - 1 year Career / Technical ComputersCreative ArtsEngineeringArtisticRealistic
- Music, Techniques of Audio Engineering, Certificate of TechnologyCertificate1 - 2 years Career / Technical ComputersCreative ArtsEngineeringArtisticRealistic
- NDT, Fixed Equipment Specialist, Enhanced Skills CertificatePrevious Degree RequiredCertificate6 months or less Career / Technical Industrial ServicesConventionalRealistic
- NDT, Nondestructive Testing Technology, Associate of Applied Science2 years DegreeCareer / Technical Industrial ServicesConventionalRealistic
- NDT, Nondestructive Testing Technology, Certificate of TechnologyCertificate1 - 2 years Career / Technical Industrial ServicesConventionalRealistic
- NDT, Quality Analyst, Enhanced Skills CertificatePrevious Degree RequiredCertificate6 months or less Career / Technical Industrial ServicesConventionalRealistic
- NDT, Quality Assurance Technician, Occupational CertificateCertificate6 months - 1 year Career / Technical Industrial ServicesConventionalRealistic
- Nursing, Associate Degree Nursing, Generic Program, Associate of Applied Science2 years DegreeCareer / Technical Health / Medical Investigative Social
- Nursing, LVN/Paramedic to RN Transition Nursing, Associate of Applied Science2 years DegreeCareer / Technical Health / Medical Investigative Social
- Nursing, Vocational Nursing, Level 2 CertificateCertificate1 - 2 years Career / Technical Health / Medical Investigative Social
- Occupational Therapy Assistant, Associate of Applied Science2 years DegreeCareer / Technical Health / Medical Investigative Social
- Paralegal, Associate of Applied Science2 years DegreeCareer / Technical Business Law Conventional Enterprise
- Pharmacy Technician, Certificate of TechnologyCertificate1 - 2 years Career / Technical Health / Medical Conventional Realistic
- Physical Education Personal Trainer, Certificate of TechnologyCertificate1 - 2 years Career / Technical Consumer Services Education Health / Medical Enterprise Realistic
- Physical Sciences, Associate of Science University Transfer2 years Degree Math / Science Investigative Realistic
- Physical Therapist Assistant, Associate of Applied Science2 years Degree Career / Technical Health / Medical Social Realistic
- Pipefitting Technology, Occupational Certificate Certificate6 months or less Career / Technical Industrial Services Realistic
- Plumbing and Pipefitting Technology, Continuing Education CertificateCertificate6 months or less Career / Technical Industrial Services Realistic
- Plumbing and Pipefitting, Continuing Education CertificateCertificate6 months or less Career / Technical Industrial Services Realistic
- Process Technology Chemical Technician, Enhanced Skills Certificate Previous Degree RequiredCertificate6 months or less Career / Technical Industrial Services Realistic
- Process Technology Power Technician, Enhanced Skills Certificate Previous Degree RequiredCertificate6 months or less Career / Technical Industrial Services Realistic
- Process Technology, Associate of Applied Science2 years Degree Career / Technical Industrial Services Realistic
- Process Technology, Level 2 CertificateCertificate1 - 2 years Career / Technical Industrial Services Realistic
- Real Estate Advanced, Level 2 CertificateCertificate1 - 2 years Degree Business Consumer Services Conventional Enterprise Social Realistic
- Real Estate, Associate of Applied Science2 years Degree Career / Technical Business Consumer Services Conventional Enterprise Social Realistic
- Real Estate, Certificate of Technology CertificateCertificate1 - 2 years Degree Career / Technical Business Consumer Services Conventional Enterprise Social Realistic
- Real Estate, Occupational Certificate Certificate6 months - 1 year Degree Career / Technical Business Consumer Services Conventional Enterprise Social Realistic
- Respiratory Care, Associate of Applied Science2 years Degree Career / Technical Health / Medical Investigative Social Realistic
- Social and Behavioral Sciences, Associate of Arts University Transfer2 years Degree Social / Behavioral Sciences Conventional Enterprise Investigative Social Realistic
- Surgical Technology, Associate of Applied Science2 years Degree Career / Technical Health / Medical Social Realistic
- Surgical Technology, Certificate of Technology CertificateCertificate1 - 2 years Degree Career / Technical Health / Medical Social Realistic
- Teaching - Early Childhood to 6th Grade, Associate of Arts in Teaching University Transfer2 years Degree Education Artistic Social
- Teaching - Grades 7 to 12, Associate of Arts in Teaching University Transfer2 years Degree Education Artistic Social
- Truck Driving (Commercial), Occupational Certificate Certificate6 months - 1 year Career / Technical Transportation Realistic
- Welding Technology, Associate of Applied Science2 years Degree Career / Technical Industrial Services Realistic
• Welding Technology, Occupational Certificate (6 months - 1 year)
  Career / Technical / Industrial Services
  Realistic

• Welding, Combination Welder, Certificate of Technology (1 - 2 years)
  Career / Technical / Construction Repair
  Industrial Services
  Realistic

• Welding, Combination Welding, Continuing Education (6 months or less)
  Career / Technical / Construction
  Industrial Services
  Realistic

• Welding, Gas Shielded Welding, Certificate of Technology (1 - 2 years)
  Career / Technical / Industrial Services
  Realistic

• Welding, Industrial Welder, Level 2 Certificate (1 - 2 years)
  Career / Technical / Industrial Services
  Realistic

• Welding, Sheet Metal Welder, Continuing Education (6 months or less)
  Career / Technical / Industrial Services
  Realistic

• Welding, Stick Pipe Welder, Occupational Certificate (6 months - 1 year)
  Career / Technical / Industrial Services
  Realistic

• Accounting, Associate of Applied Science (2 years)
  Career / Technical / Business
  Math / Science
  Conventional

• Art and Design, Associate of Applied Science (2 years)
  Career / Technical / Creative Arts
  Enterprising

• Art and Design, Certificate of Technology (1 - 2 years)
  Career / Technical / Creative Arts
  Enterprising

• Art and Design, Occupational Certificate (6 months - 1 year)
  Career / Technical / Creative Arts
  Enterprising

• Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Ford Automotive Student Educational Training (ASSET) Program, Level 2 Certificate (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Art, Commercial Art

• Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Future Automotive Service Technicians (FAST) Program Automotive Technology, Level 2 Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, General Motors Automotive Service Educational Program (ASEP), Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Honda Professional Automotive Career Training (PACT) Program, Level 2 Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Mopar College Automotive Program (CAP), Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Mopar College Automotive Program (CAP), Level 2 Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Auto Tech, Toyota Technician Training & Education Network (T-TEN) Program, Level 2 Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Automotive Collision Repair Technology Management Specialty, Associate of Applied Science (2 years)
  Career / Technical / Business
  Transportation
  Realistic

• Automotive Collision Repair Technology Management Specialty, Certificate of Technology (1 - 2 years)
  Career / Technical / Business
  Transportation
  Realistic

• Automotive Collision Repair Technology, Associate of Applied Science (2 years)
  Career / Technical / Transportation
  Realistic

• Automotive Collision Repair, Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic

• Automotive Collision, Automotive Painting Specialty, Occupational Certificate (6 months - 1 year)
  Career / Technical / Transportation
  Realistic

• Automotive Collision, Non-Collision Repair, Certificate of Technology (1 - 2 years)
  Career / Technical / Transportation
  Realistic
• Automotive Collision, Repair Assistant, Occupational Certificate 6 months - 1 year Career / Technical

• Biomedical Clinical Equipment Technician, Associate of Applied Science 2 years Degree Career / Technical Computers Health / Medical Investigative Realistic

• Biomedical Clinical Equipment Technician, Certificate of Technology 1 - 2 years Career / Technical Computers Health / Medical Investigative Realistic

• Biomedical Clinical Equipment Technician, Level 2 Certificate 1 - 2 years Career / Technical Computers Health / Medical Investigative Realistic

• Business Management - Entrepreneur, Associate of Applied Science 2 years Degree Career / Technical Business Conventional Enterprising Social

• Business Management - Entrepreneurship, Level 2 Certificate 1 - 2 years Career / Technical Business Conventional Enterprising Social

• Business Management - Retail Management, Certificate of Technology 1 - 2 years Career / Technical Business Conventional Enterprising Social

• Business Management, Associate of Applied Science 2 years Degree Career / Technical Business Conventional Enterprising Social

• Business Management, Level 2 Certificate 1 - 2 years Career / Technical Business Conventional Enterprising Social

• Business Management, Occupational Certificate 6 months - 1 year Career / Technical Business Conventional Enterprising Social

• Business Marketing Foundations of Marketing Specialty, Occupational Certificate 6 months - 1 year Career / Technical Business Conventional Enterprising

• Business, Administrative Assistant, Certificate of Technology 1 - 2 years Career / Technical Business Conventional Enterprising

• Business, Associate of Arts University Transfer 2 years Degree Business Conventional Enterprising Social

• Business, Executive Administrative Assistant, Associate of Applied Science 2 years Degree Career / Technical Business Conventional

• Business, Executive Administrative Assistant, Level 2 Certificate 1 - 2 years Career / Technical Business Conventional Enterprising

• Business, Management Specialty, Certificate of Technology 1 - 2 years Career / Technical Business Conventional Enterprising

• Business, Medical Office Support, Enhanced Skills Certificate Previous Degree Required 6 months or less Career / Technical Business Health / Medical Conventional

• Business, Office Assistant, Occupational Certificate 6 months - 1 year Career / Technical Business Conventional Enterprising

• Child Development, Associate Training for Director, Occupational Certificate 6 months - 1 year Career / Technical Education Enterprising Social

• Child Development/Early Childhood Education, Associate of Applied Science 2 years Degree Career / Technical Education Artistic Social

• Child Development/Early Childhood Education, Certificate of Technology 1 - 2 years Career / Technical Education Artistic Social

• CIT, Advanced Information Technology Security Specialty, Occupational Certificate 6 months - 1 year Career / Technical Computers Conventional Investigative Realistic

• CIT, Applications Programming Specialty, Associate of Applied Science 2 years Degree Career / Technical Computers Conventional Investigative

• CIT, Applications Programming, Certificate of Technology 1 - 2 years Career / Technical Computers Conventional Investigative

• CIT, Applied Computer Electronics Technology

• CIT, Beginning Network Administration Cisco Specialty, Occupational Certificate 6 months - 1 year Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Computer Information Technology Foundations, Occupational Certificate 6 months - 1 year Career / Technical Computers Conventional Investigative Realistic

• CIT, Desktop Support and Microsoft Network Administration, Associate of Science 2 years Degree Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Desktop Support and Microsoft Network Administration, Certificate of Technology 1 - 2 years Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Information Technology Security Specialty, Associate of Applied Science 2 years Degree Career / Technical Computers Conventional Investigative Realistic

• CIT, Information Technology Security Specialty, Certificate of Technology 1 - 2 years Career / Technical Computers Conventional Investigative Realistic

• CIT, Introductory Game Design and Development, Occupational Certificate 6 months - 1 year Career / Technical Computers Conventional

• CIT, Network Administration Cisco Specialty, Associate of Applied Science 2 years Degree Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Network Administration Cisco Specialty, Certificate of Technology 1 - 2 years Career / Technical Computers Conventional Enterprising Investigative Realistic

• CIT, Simulation and Game Design, Associate of Applied Science 2 years Degree Career / Technical Computers Conventional Investigative

• CIT, Simulation and Game Design, Level 2 Certificate 1 - 2 years Career / Technical Computers Conventional Investigative

• CIT, Web Applications Development Specialty, Associate of Applied Science 2 years Degree Career / Technical Computers Artistic Conventional Investigative Realistic

• CIT, Web Applications Development Specialty, Certificate of Technology 1 - 2 years Career / Technical Computers Artistic Conventional Investigative Realistic
• CIT, Web Page Design and Implementation Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Artistic Conventional Investigative Realistic
• Communications, Associate of Arts University Transfer 2 years Degree Liberal Arts Artistic Conventional Investigative Social
• Computer Science, Associate of Science University Transfer 2 years Degree Computers Conventional Investigative
• Construction Management, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Conventional Investigative Realistic
• Construction Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Conventional Investigative Realistic
• Cosmetology High School Operator Dual Credit, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Artistic Enterprising Social Realistic
• Cosmetology Instructor, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Education Artistic Enterprising Social Realistic
• Cosmetology Instructor, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Education Artistic Enterprising Social Realistic
• Cosmetology Instructor, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Education Artistic Enterprising Social Realistic
• Cosmetology Operator, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Artistic Enterprising Social Realistic
• Cosmetology Operator, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Artistic Enterprising Social Realistic
• Cosmetology, Facial Specialist (Esthetician), Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Health / Medical Artistic Conventional Investigative Realistic
• Cosmetology, Nail Technician, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Artistic Conventional Investigative Social Realistic
• Criminal Justice Core, Occupational Certificate Certificate 6 months - 1 year Career / Technical Law Enterprising Social Realistic
• Criminal Justice, Associate of Applied Science 2 years Degree Career / Technical Law Enterprising Social Realistic
• Criminal Justice, Certificate of Technology Certificate 1 - 2 years Career / Technical Law Enterprising Social Realistic
• Criminal Justice, Level 2 Certificate of Technology Certificate 1 - 2 years Career / Technical Law Enterprising Social Realistic
• Culinary Arts - Chef Training/Restaurant Management, Occupational Certificate Certificate 6 months - 1 year Career / Technical Business Consumer Services Conventional Enterprising Social Realistic
• Culinary Arts - Pastry Chef Specialty, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Enterprising Realistic
• Culinary Arts - Pastry Chef Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Realistic
• Culinary Arts, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Enterprising Realistic
• Culinary Arts, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Realistic
• Culinary, Restaurant Management Career / Technical Business Consumer Services Conventional Enterprising Social Realistic
• Culinary, Restaurant Management, Associate of Applied Science 2 years Degree Career / Technical Business Consumer Services Conventional Enterprising Social Realistic
• Culinary, Restaurant Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Business Consumer Services Conventional Enterprising Social Realistic

D
• Diesel Tech, Heavy Diesel Power Specialty, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Industrial Services Transportation Realistic
• Diesel Tech, Heavy Diesel Power Specialty, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Industrial Services Transportation Realistic
• Diesel Tech, Heavy Diesel Truck, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Industrial Services Transportation Realistic
• Diesel Tech, Heavy Diesel Truck, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Industrial Services Transportation Realistic
• Dietetics, Food Service Management, Certificate of Technology Certificate 1 - 2 years Career / Technical Consumer Services Enterprising Investigative Social Realistic
• Dietetics, School Food Service Specialty, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Enterprising Investigative Social Realistic

E
• Electrical Technology Communications and Alternative Energy, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electrical Technology, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electrical Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electrical Technology, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electrical Technology, Level 2 Certificate Certificate 1 - 2 years Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electrical Technology, Occupational Certificate Certificate 6 months - 1 year Career / Technical Construction Repair Industrial Services Investigative Realistic
• Electronics Technology, Associate of Applied Science 2 years Degree Career / Technical Computers Investigative Realistic
• Electronics Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Investigative Realistic
• Electronics Technology, Level 2 Certificate Certificate 1 - 2 years Career / Technical Computers Investigative Realistic

San Jacinto College 2018-2019
• Electronics Technology, Occupational Certificate - 6 months - 1 year / Technical
• Engineering Design Graphics Architectural/Civil/Structural Specialty, Associate of Applied Science - 2 years / Degree
• Engineering Design Graphics Architectural/Civil/Structural Specialty, Certificate of Technology - 1 - 2 years / Career
• Engineering Design Graphics Mechanical Specialty, Associate of Applied Science - 2 years / Degree
• Environmental Health and Safety Technology, Certificate - 1 - 2 years / Career
• Environmental Health and Safety Technology, Associate of Applied Science - 2 years / Degree
• Environmental Health and Safety Technology, Certificate of Technology - 1 - 2 years / Career
• Health Science Medical Assisting Pathway, Associate of Applied Science - 2 years / Degree
• Health Information Mgmt, Cancer Data Management, Advanced Technical Certificate - 1 - 2 years / Career
• Health Information Mgmt, Medical Coding Specialist, Level 2 Certificate - 1 - 2 years / Career
• Health Science Pharmacy Technician Pathway, Associate of Applied Science - 2 years / Degree
• HVAC, Commercial Air Conditioning Technology, Associate of Applied Science - 2 years / Degree
• HVAC, Commercial Air Conditioning Technology, Certificate of Technology - 1 - 2 years / Career
• HVAC, Commercial Air Conditioning Technology, Level 2 Certificate - 2 years / Career
• HVAC, Residential Air Conditioning Technology Occupational Certificate - 6 months - 1 year / Career
• Fine Arts, Associate of Arts - 2 years / Degree
• Fine Arts, Associate of Arts - 2 years / Degree
• Fine Arts, Associate of Arts University Transfer - 2 years / Degree
• Fine Arts, Associate of Arts University Transfer - 2 years / Degree
• Fire Protection, Chief Officer, Enhanced Skills Certificate - Previous Degree Required - 6 months - 1 year / Career
• Firefighting, Associate of Applied Science - 2 years / Degree
• Firefighting, Certificate of Technology - 1 - 2 years / Career
• General Studies, Associate of Arts - 2 years / Degree
• General Studies, Associate of Arts University Transfer - 2 years / Degree
• Global Logistics and Supply Chain Management, Associate of Applied Science - 2 years / Degree
• Global Logistics and Supply Chain Management, Certificate of Technology - 1 - 2 years / Career
• Global Logistics and Supply Chain Management, Certificate of Technology - 1 - 2 years / Career
• Global Logistics and Supply Chain Management, Certificate of Technology - 1 - 2 years / Career
- HVAC, Residential Air Conditioning Technology, Associate of Applied Science 2 years Degree Career / Technical Construction Repair Industrial Services Conventional Investigative Realistic
- HVAC, Residential Air Conditioning Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Construction Repair Industrial Services Conventional Investigative Realistic

I
- Instrumentation Technology, Associate of Applied Science 2 years Degree Career / Technical Industrial Services Conventional Investigative Realistic
- Instrumentation Technology, Enhanced Skills Certificate Previous Degree Required Certificate 6 months - 1 year Career / Technical Industrial Services Conventional Investigative Realistic
- Instrumentation Technology, Level 2 Certificate Certificate 1 - 2 years Career / Technical Industrial Services Conventional Investigative Realistic
- Interior Design, Associate of Applied Science 2 years Degree Career / Technical Consumer Services Creative Arts Artistic Enterprising
- Interior Design, Pre-Professional Level 2 Certificate Certificate 1 - 2 years Career / Technical Consumer Services Creative Arts Artistic Enterprising

K
- Kinesiology, Associate of Arts University Transfer 2 years Degree Health / Medical Enterprising Realistic

L
- Life Sciences, Associate of Science University Transfer 2 years Degree Math / Science Investigative
- Long Term Care Administration, Advanced Technical Certificate Previous Degree Required 1 - 2 years Degree Career / Technical Business Health / Medical Conventional Enterprising Social

M
- Maritime Transportation, Associate of Applied Science 2 years Degree Career / Technical Transportation Conventional Enterprising Investigative Realistic
- Maritime, Occupational Certificate Certificate 6 months - 1 year Career / Technical Transportation Conventional Enterprising Investigative Realistic
- Massage Therapy, Occupational Certificate Certificate 6 months - 1 year Career / Technical Consumer Services Health / Medical Conventional Social
- Mathematics, Associate of Science University Transfer 2 years Degree Math / Science Conventional Investigative Realistic
- Medical Assisting, Certificate of Technology Certificate 1 - 2 years Career / Technical Health / Medical Conventional Social
- Medical Imaging, Computed Tomography, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Health / Medical Investigative Realistic
- Medical Imaging, Diagnostic Medical Sonography, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Realistic
- Medical Imaging, Invasive Cardiovascular Technology, Advanced Technical Certificate Previous Degree Required Certificate 1 - 2 years Career / Technical Health / Medical Investigative Realistic
- Medical Imaging, Invasive Cardiovascular Technology, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Realistic
- Medical Imaging, Magnetic Resonance Imaging, Advanced Technical Certificate Previous Degree Required Certificate 6 months or less Career / Technical Health / Medical Investigative Realistic
- Medical Imaging, Mammography, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Health / Medical Investigative Realistic
- Medical Laboratory Technology, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Realistic
- Medical Laboratory Technology, Microscopic Tissue Anatomy, Advanced Technical Certificate Previous Degree Required Certificate 6 months - 1 year Career / Technical Health / Medical Social
- Medical Radiography, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Realistic
- Mental Health Clinical and Counseling Psychology, Associate of Applied Science 2 years Degree Career / Technical Health / Medical Investigative Social
- Mental Health Technician, Occupational Certificate Certificate 6 months - 1 year Career / Technical Health / Medical Investigative Social
- Mental Health, Substance Abuse Counseling, Level 2 Certificate Certificate 1 - 2 years Career / Technical Health / Medical Investigative Social
- Mental Health, Substance Abuse Prevention Specialist, Occupational Certificate Certificate 6 months - 1 year Career / Technical Health / Medical Investigative Social
- Mental Health-Substance Abuse Counseling, Occupational Certificate Certificate 6 months - 1 year Career / Technical Health / Medical Investigative Social
- Music, Associate of Arts in Music University Transfer 2 years Degree Creative Arts Artistic
- Music, Audio Engineering
- Music, Broadcast Audio Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Creative Arts Engineering Artistic Realistic
- Music, Sound Recording, Occupational Certificate Certificate 6 months - 1 year Career / Technical Computers Creative Arts Engineering Artistic Realistic
- Music, Techniques of Audio Engineering, Certificate of Technology Certificate 1 - 2 years Career / Technical Computers Creative Arts Engineering Artistic Realistic

N
- NDT, Fixed Equipment Specialist, Enhanced Skills Certificate Previous Degree Required Certificate 6 months or less Career / Technical Industrial Services Conventional Realistic
- NDT, Nondestructive Testing Technology, Associate of Applied Science 2 years Degree Career / Technical Industrial Services Conventional Realistic
- NDT, Nondestructive Testing Technology, Certificate of Technology Certificate 1 - 2 years Career / Technical Industrial Services Conventional Realistic
San Jacinto College 2018-2019

- NDT, Quality Analyst, Enhanced Skills Certificate - Previous Degree Required Certificate 6 months or less Career / Technical / Industrial Services Conventional Enterprising Realistic
- NDT, Quality Assurance Technician, Occupational Certificate - Certificate 6 months - 1 year Career / Technical / Industrial Services Conventional Enterprising Realistic
- Nursing, Associate Degree Nursing, Generic Program, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Investigative Social
- Nursing, LVN/Paramedic to RN Transition Nursing, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Investigative Social
- Nursing, Vocational Nursing, Level 2 Certificate - Certificate 1 - 2 years Career / Technical / Health / Medical Investigative Social
- Occupational Therapy Assistant, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Investigative Social

- Paralegal, Associate of Applied Science 2 years Degree Career / Technical / Business / Consumer / Law / Conventional Enterprising
- Pharmacy Technician, Certificate of Technology - Certificate 1 - 2 years Career / Technical / Health / Medical Conventional Enterprising Realistic
- Physical Education Personal Trainer, Certificate of Technology - Certificate 1 - 2 years Career / Technical / Consumer Services / Education / Health / Medical Enterprising Realistic
- Physical Sciences, Associate of Science - University Transfer 2 years Degree Math / Science / Investigative Realistic
- Physical Therapist Assistant, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Social Realistic
- Pipefitting Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial Services Realistic
- Plumbing and Pipefitting Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial Services Realistic
- Plumbing and Pipefitting, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial Services Realistic
- Process Technology Chemical Technician, Enhanced Skills Certificate - Previous Degree Required Certificate 6 months or less Career / Technical / Industrial Services Realistic
- Process Technology Power Technician, Enhanced Skills Certificate - Previous Degree Required Certificate 6 months or less Career / Technical / Industrial Services Realistic
- Process Technology, Associate of Applied Science 2 years Degree Career / Technical / Industrial Services Realistic

- Respiratory Care, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Investigative Social

- Automotive Technology, Associate of Applied Science 2 years Degree Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic
- Automotive Technology, Occupational Certificate - Certificate 6 months or less Career / Technical / Industrial / Services / Realistic

- Surgical Technology, Associate of Applied Science 2 years Degree Career / Technical / Health / Medical Social Realistic
- Surgical Technology, Certificate of Technology - Certificate 1 - 2 years Career / Technical / Health / Medical Social Realistic

- Teaching - Early Childhood to 6th Grade, Associate of Arts in Teaching - University Transfer 2 years Degree Education / Artistic Social
- Teaching - Grades 7 to 12, Associate of Arts in Teaching - University Transfer 2 years Degree Education / Artistic Social
- Truck Driving (Commercial), Occupational Certificate - Certificate 6 months - 1 year Career / Technical / Transportation / Realistic

- Welding Technology, Associate of Applied Science 2 years Degree Career / Technical / Industrial Services Realistic
- Welding, Combination Welder, Certificate of Technology - Certificate 1 - 2 years Career / Technical / Construction / Repair / Industrial Services Realistic
- Welding, Combination Welding, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Construction / Repair / Industrial Services Realistic
- Welding, Gas Shielded Welding, Certificate of Technology - Certificate 1 - 2 years Career / Technical / Industrial Services Realistic
- Welding, Sheet Metal Welder, Continuing Education Certificate - Certificate 6 months or less Career / Technical / Industrial Services Realistic
GENERAL INFORMATION

This catalog is a general information publication only. It is not intended to nor does it contain all regulations that relate to students. Moreover, the provisions of this catalog do not constitute a contract, expressed or implied, between any applicant, student or faculty member and San Jacinto College. The College reserves the right to withdraw courses at any time and to change fees, rules, policies, calendar, curriculum, degree programs, degree requirements, graduation procedures and any other requirements affecting students. Changes may occur without notice and will be immediately effective unless otherwise specified, and will apply to both prospective students and those already enrolled. When changes are made, updated information usually can be found on the College website at www.sanjac.edu.

San Jacinto College reserves the right not to teach any course listed in the catalog or its published schedules if enrollment does not warrant offering it or if other circumstances dictate its withdrawal.

San Jacinto Community College District

San Jacinto College serves the communities and citizens of East Harris County, Texas. The San Jacinto College taxing area includes the Channelview, Deer Park, Galena Park, La Porte, Pasadena and Sheldon Independent School Districts. The College’s service area expands to include portions of the Humble, Pearland and Clear Creek school districts.

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Vision

San Jacinto College will be the leader in educational excellence and in the achievement of equity among diverse populations. We will empower students to achieve their goals, redefine their expectations and encourage their exploration of new opportunities. Our passions are people, learning, innovation and continuous improvement.

Our Mission

Our mission is to ensure student success, create seamless transitions and enrich the quality of life in the communities we serve.

Values

Approved by the Board of Trustees on June 2, 2008

Integrity: Ethical and Professional
“We act in ways which instill confidence and trust.”

Excellence: In Everything We Do
“We achieve quality results in everything we do.”

Accountability: It’s Up to Us
“We take responsibility for our commitments and outcomes.”

Innovation: Lead the Way
“We apply our knowledge, skill, insight, and imagination to recognize opportunities, solve problems, and recommend new solutions.”

Sense of Community: Caring for Those We Serve and Ourselves
“We demonstrate concern for the well-being of our students, our community, and ourselves.”

Student Success: Our Ultimate Measure
“We enable students to achieve their goals.”

Diversity: Celebrate the Differences
“We celebrate the diversity of ideas and cultures.”

Collaboration: We Work Together
“We work together for the benefit of the College.”
Accreditation

The San Jacinto Community College District is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the associate degree. Contact the
Commission on Colleges
1866 Southern Lane
Decatur, Georgia 30033-4097

or call 404-679-4500 for questions about the accreditation of the San Jacinto Community College District.

Equal Opportunity Statement

The San Jacinto College District is committed to equal opportunity for all students, employees and applicants without regard to race, creed, color, national origin, citizenship status, age, disability, pregnancy, religion, gender, sexual orientation, gender expression or identity, genetic information, marital status or veteran status in accordance with applicable federal and state laws.

No person including students, faculty, staff, part-time and temporary workers will be excluded from participation in, denied the benefits of or be subjected to discrimination or harassment under any program or activity sponsored or conducted by the San Jacinto College District on the basis of the categories listed.

The following College officials have been designated to handle inquiries regarding the College's non-discrimination policies:

Vice Chancellor, Human Resources
Stephen Trncak - Equal Opportunity Compliance Officer
4624 Fairmont Parkway
Pasadena, Texas 77504
stephen.trncak@sjcd.edu
281-998-6348

Associate Vice Chancellor, Student Services
Joanna Zimmermann (students) - Co-Lead Title IX Coordinator
8060 Spencer Highway
Pasadena, Texas 77505
joanna.zimmermann@sjcd.edu
281-476-1863

Vice President, Human Resources
Sandra Ramirez (employees) - Co-Lead Title IX Coordinator
4620 Fairmont Parkway
Pasadena, Texas 77504
sandra.ramirez@sjcd.edu
281-991-2648

Vice Chancellor, Strategic Initiatives, Workforce Development, Community Relations and Diversity
Allatia Harris (equity in athletics)
8060 Spencer Highway
Pasadena, Texas 77505
allatia.harris@sjcd.edu
281-459-7140
ADMISSIONS

Steps to Enrollment
San Jacinto College is an open admission institution, and all students are welcome to apply. We are committed to meeting the needs of all applicants and will provide any information necessary to make sure the admissions process is clear and concise.

Getting Started
Listed below is an overview of steps to follow to get started at San Jacinto College.

1. Application - All students must apply online using the Apply Texas website at www.applytexas.org. There is no charge to apply.
   a. Veterans /Dependents - Students who plan to use VA benefits should visit the Veteran Services website at www.sanjac.edu/veterans for more information on the next steps.
   b. International Students - Must contact the International Student Services Office at South Campus S-6.120 and view the website at www.sanjac.edu/international-student-application to obtain the International Student Application packet. Refer to the International Admissions section.

2. Placement Testing - Meet with an admissions advisor to determine testing needed for enrollment.
   Note: Prior to registering for classes, students must provide information to document their Texas Success Initiative (TSI) exemption or compliance. This can be done by testing on campus, providing official test scores or documentation of exemption (See section titled Exemptions from the Texas Success Initiative.)
   English proficiency is required for individuals whose native language is not English. Refer to the English Language Proficiency Requirements for Students Who Are Speakers of Other Languages section.

3. Transcripts - Request all official transcripts from high school and/or all colleges attended. Send unopen official transcripts electronically (not email) or via US Mail to Records Management
   13735 Beamer Road
   Houston, TX 77089
   or hand deliver to your nearest SJCD campus. Refer to the Transcripts for Admissions section.
   a. High School Equivalency - verify Texas high school equivalency completion with the Admissions Office. Students may view their high school equivalency results by going to tea4avtuna.tea.state.tx.us/Tea.TxChse.Web/Forms/CertificateSearch.aspx or Tea.TxChse.Web/Forms/CertificateSearch.aspx. High school equivalency transcripts from out of state must be requested by the student and sent officially in a sealed envelope from the state of origin.
   b. Foreign transcripts - Documents must be evaluated by an approved evaluation agency. For an approved list go to www.sanjac.edu/transcript-evaluation-services.
   c. Evaluation - To request an evaluation of U.S. college transcripts, please call 281-998-6150 or contact your campus Admissions or Educational Planning, Counseling & Completion Office for credit to transfer and/or for financial aid purposes. Transcripts must be received and on file with San Jacinto College before the Transcript Evaluation Form may be submitted. If all transcripts are not received at the time the initial request is submitted, another request will be required to evaluate additional transcripts.
   d. College in the School of Business - If you have attended another college, please provide official transcripts with your application.

4. Meningitis Vaccination - The Texas Legislature requires that all incoming Texas college students under the age of 22 must receive a vaccination or booster against bacterial meningitis prior to registration. The vaccine is required for all new students to San Jacinto College, including transfer and returning San Jacinto College students who have had a break in enrollment for one or more fall or spring semesters. Documentation should be provided to your campus Admissions Office, faxed to 281-669-4720 or scanned and emailed to meningitis.docs@sjcd.edu. For additional information on this requirement, visit our website at www.sanjac.edu/meningitis.

5. Academic Advising - Students enrolling for the first time should meet with an admissions advisor to discuss test results, life and career goals, create an educational plan and select courses.
   Note: A student should claim a Secure Online System (SOS) account after meeting with an advisor.

6. Orientation - It is mandatory for all first-time-in-college, including prior dual credit, and transfer students with fewer than 12 college hours to attend orientation. After you have been fully accepted, sign up for New Student Orientation through the S.O.S. at www.sanjac.edu/soslogin.

7. Financial Aid and Scholarships - Complete the FAFSA form online at www.fafsa.gov and contact the Financial Aid office with questions. Scholarship information is available at www.sanjac.edu/foundation/scholarships.

8. Register and Pay for Classes - Login to SOS at www.sanjac.edu/soslogin to register. Information regarding payment plans is available at www.sanjac.edu/payments or call 281-998-6150 with any questions.

9. Student ID - Go to the Admissions Office at least 24 hours after you have paid for your first semester of classes to get a free ID card. There is a $10 replacement fee per ID card.

10. Parking Permit - After registration and payment, parking permits are available to students in the Business Office at no additional cost. A parking permit must be displayed on each automobile parked on any San Jacinto College campus by a student or for the benefit of a student. Students will fill out a brief application and will need their vehicle license plate number. A current student ID card or state issued picture ID is required to receive a parking permit. A fine will be imposed on any student who fails to comply with parking regulations.

11. San Jac Email Address - After registration and payment go to www.sanjac.edu/email to set up an official San Jac email account. Official communication from the College to the student is sent through this email account.

12. Services for Students with Disabilities - Accommodations are available to students with documented disabilities attending San Jacinto College. If you have a disability and would like to apply for accommodations, please contact the Accessibility Services Counselor at the campus where you plan to take classes:
   Central Campus 281-478-2768
   North Campus 281-459-7192
   South Campus 281-922-3444

Completing the Online Application for Admission
Applicants must apply for admission at www.applytexas.org. During the application process, students will be asked questions about their name, home/current residence, mailing address, personal information, program of study (major), high school
information, any previous colleges attended and degrees awarded, and residency. Students must also acknowledge that they have read and answered accurately all areas of the application.

The application must be complete and submitted before it can be processed. The application will be processed within 48 business hours after it is submitted. To be sure that the application has been received, students must see the confirmation notice that appears after submitting the application. After it is processed, students will receive information sent to the email address they submitted on the application. The information in the email includes your next steps for admission and is extremely important. Students must read and comply with any instructions or requests.

Admission is invalid if granted on the basis of incorrect information, omitted facts, or falsified documents which, if known, would have caused the applicant to be ineligible for admission or financial aid. These actions may result in disciplinary action.

Transcripts for Admission
Students are required to submit all official high school and/or college transcripts. Transcripts are considered official when they bear the signature of the registrar or some other appropriate school official, the seal of the issuing school and are mailed or submitted from the sending institution. Transcripts are also considered official if hand carried in a sealed envelope from the institution and submitted within 60 days of issue.

Transcripts become the property of San Jacinto College and cannot be returned to the student. Transcripts will be kept on file for 90 days after the end of the term in which the transcript was received and will be destroyed if the student has not enrolled.

Evaluation of Transcripts for Transfer Students
Students may request the College to conduct a course-by-course evaluation of official transcripts from regionally accredited colleges and universities or a college or university that has been approved by committee review. For a list of regional accrediting agencies see the Transfer Credit section of the catalog. To request an evaluation, please call 281-998-6150 or contact your campus Admissions or Educational Planning, Counseling & Completion Office. Transcripts must be received and on file by the College before the Transcript Evaluation Form is submitted.

When the evaluation is completed, the student will be notified via his or her San Jac email account after which the equivalent courses may be viewed by going to SOS, then clicking Student Records, and then clicking Unofficial Transcript.

Credit from transfer institutions on quarter hours will be evaluated using a ratio of .667 quarter hours to 1 semester hour. Credit from transfer institutions on other calendar types will be evaluated using an appropriate ratio.

Evaluation of Transcripts from Other Countries
Transcripts that reflect completed course work from colleges or universities in other countries must, at the student’s expense, have a course-by-course evaluation completed by a professional evaluation service. For a list of pre-approved agencies, view the list at www.sanjac.edu/transcript-evaluation-services.

The evaluation will be reviewed by the College upon request for acceptance before credit will be posted. Course work completed in a language other than English will be given generic credit only. Equivalency will need to be determined at the department level.

Academic Fresh Start for courses at San Jacinto College
Under the provisions of TEC §51.931, an applicant for readmission may elect an Academic Fresh Start at the time of admission. An applicant who applies under this section and is admitted as a student may not receive any course credit for courses taken 10 or more years prior to enrollment under this section. Check with the Educational Planning, Counseling & Completion Office for more detailed information.

Financial aid applicants should contact the Financial Aid office before requesting Academic Fresh Start. Students using veterans benefits should contact Veteran Services before requesting Academic Fresh Start.

Admission Types
San Jacinto College recognizes four types of admission:

- High school graduate
- High School Equivalency Exam graduate
- College or university transfer
- Individual approval
- Provisional admission
  - Conditional admission-extenuating circumstances
  - Dual credit/early admission

Note: Some programs of instruction may have special requirements in addition to those normally required for admission to the College.

High School Graduate
To be admitted as a high school graduate, students must submit an official high school transcript verifying the date of graduation. San Jacinto College accepts all public high school transcripts. Home school transcripts are accepted when signed by a parent or legal guardian and accompanied by a verification of home school completion. This form is located at www.sanjac.edu/sites/default/files/Home-School-Complete-Verifi-Form-2-20-15.pdf. We also accept private high school transcripts that are:

- Listed on Texas Private School Accreditation Commission (TEPSAC) www.tepsac.org/#/home (http://www.tepsac.org/#/home)
- Approved by the High School Evaluation and Review Team. Submit official transcripts for review to the Admissions Office.
- Approved by a one of the regional high school accreditation bodies listed below:

Regional High School Accreditation Bodies

<table>
<thead>
<tr>
<th>Accrediting Agency</th>
<th>High School Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle States Association of Colleges and Schools - Commissions on Elementary and Secondary Schools (MSA-CESS)</td>
<td>Commissions on Elementary and Secondary Schools (<a href="http://msaecess.org">http://msaecess.org</a>)</td>
</tr>
<tr>
<td>New England Association of Schools and Colleges (NEASC)</td>
<td>New England Association of Schools and Colleges (NEASC) (<a href="http://neasc.org">http://neasc.org</a>)</td>
</tr>
<tr>
<td>Higher Learning Association</td>
<td>AdvancED (<a href="http://Advanc-ed.org">http://Advanc-ed.org</a>)</td>
</tr>
<tr>
<td>Northwest Accreditation Commission (NWAC)</td>
<td>AdvancED (<a href="http://Advanc-ed.org">http://Advanc-ed.org</a>)</td>
</tr>
</tbody>
</table>
Certificate of High School Equivalency

To be admitted as a High School Equivalency graduate, students must provide an official Texas Certificate of High School Equivalency (TxCHSE) indicating that they have passed all parts of the exam. Students are able to obtain the TxCHSE by passing all parts of the GED, HiSET OR TASC exams in Texas, and may contact the Admissions Office to add those results to their records. Transcripts from out of state must be obtained from the state of origin by the student. Students who take a Spanish High School Equivalency Exam will be required to show proof of English language proficiency. If students have not passed all parts of the Exam, they will need to see the Individual Approval section. (See Testing Department for more information on the TxCHSE).

College or University Transfer

Students may be admitted by transfer from another regionally accredited college or university or a college or university that has been approved by committee review if they are eligible to re-enroll at the last institution attended. A transfer student must submit an official transcript from each college or university previously attended.

A student who holds a degree (associate, bachelor's, master's or doctoral) may submit only an official transcript from the school that awarded the highest degree and an official transcript with any course work taken after the degree was received. However, if students are applying for financial aid, they must submit all official transcripts. If students are using course work to satisfy course prerequisites, they must submit official transcripts to document all course work.

Transfer Academic Status

A student’s academic status during the most recent term of enrollment at another college or university determines the academic status under which the student is admitted. A student on academic suspension whose suspension period is over may be admitted on academic probation and should see the Re-enrollment After Suspension section of this catalog.

A transfer student who is admitted on academic probation must earn at least a 2.0 grade point average to achieve an academic status of good standing.

A transfer student on academic suspension whose suspension period has not passed should see the Transfer Students on Probation or Suspension section.

Students are responsible for knowing if their academic status entitles them to admission. Students who are not eligible to enroll but succeed in enrolling anyway will be withdrawn and have to forfeit all tuition and fees.

Individual Approval

Conditional Admission—Extenuating Circumstances

Students who are not high school graduates or the equivalent will be admitted on a conditional basis for one term. Continuing enrollment is dependent upon meeting the following requirements:

1. Students must seek unconditional admission through one of the following avenues
   a. Enroll in appropriate college preparatory courses.
   b. Take and pass all sections of the High School Equivalency.
   c. Complete high school graduation requirements.
2. Must maintain good academic standing for continued enrollment. (See the Probation and Suspension Table)

Provisional Admission

A student who is not a high school graduate or the equivalent and over the age of 18 may be provisionally admitted under one of the following conditions:

1. A student has test scores in reading, writing and math at a level 6 or higher.
2. A student has a grade of D or higher in at least 6 college level credit hours. College level does not include developmental or CPD courses.

Students placed under Provisional Admission should note the following circumstances regarding their admission:

1. This is an unconditional admission status.
2. A student is eligible for graduation.
3. A student is not eligible for financial aid.
4. A student is not required to complete the High School Equivalency Exam.

Dual Credit/Early Admission

Students who are enrolled in high school may be conditionally admitted to the college on a dual credit/early admission basis for concurrent enrollment if they:

- submit an admission application
- submit a signed enrollment form from their high school principal or designee
- submit test scores to meet TSI testing requirements
- submit proof of meeting Texas meningitis requirements

1. Students enrolling in a degree program must meet TSI assessment requirements. Students may be exempt from the TSIA based on the exemptions listed in the Texas Success Initiative section. If the student seeks enrollment in a course requiring a designated skill prerequisite, the student must submit a passing TSIA score or applicable exemption/waiver on the section which relates to the designated skill prerequisite.
2. Students are also eligible to enroll in college courses for dual credit according to the following rules:

   Courses that require reading/writing TSI complete:
   - If the student achieves a Level 2 final recommended score (4000+), as defined by the Texas Education Agency (TEA), on the English II State of Texas Assessment of Academic Readiness End of Course (STAAR EOC); or
   - If the student achieves a composite score of 23 on the PLAN with a 19 or higher in English or an English score of 435 on the ACT-Aspire.

   Courses that require mathematics TSI complete:
   - If the student achieves a Level 2 final recommended score (4000+), as defined by TEA, on the Algebra I STAAR EOC and passing grade (defined as 70 or higher) in the Algebra II course; or
• If the student achieves a composite score of 23 on the PLAN with a 19 or higher in mathematics or a mathematics score of 431 on the ACT-Aspire.

These students are also subject to the guidelines in the Conditions of Dual Credit/Early Admission Enrollment for High School Students section.

### Conditions of Dual Credit/Early Admission Enrollment for High School Students

High school students may be admitted for dual credit/early admission enrollment under the following conditions:

1. To continue enrollment in college-level classes, students must meet the current academic standing rules of San Jacinto Community College District. (See Academic Probation and Suspension Table section.)
2. Students may not enroll in courses for which they have not complied with TSI or met the course or skill prerequisites.
3. The College will release official transcripts of students admitted on a dual credit or an early admission basis through their expected graduation date. After that date, the final high school transcript indicating graduation must be submitted before additional official transcripts will be released.
4. Because any form of early admission is conditional, the College may impose additional limitations and requirements.

Information on other dual credit programs is available on each of the San Jacinto College campuses in the dual credit offices. (See www.sanjac.edu/dual-credit)

### Early College High School Programs

**Clear Horizons Early College High School - South Campus**

Clear Horizons Early College High School (CHECHS) is a partnership between San Jacinto College and Clear Creek Independent School District (CCISD) at the South Campus. Participants in the program are chosen by a selection process established by CHECHS. Students classified as high school freshmen, sophomores, juniors and seniors enrolling in college-level courses as part of this program must meet the following requirements to be admitted for concurrent enrollment:

1. Submit a San Jacinto College admission application.
2. Submit official scores on TSI approved assessment test.
3. Meet the current academic standing rules of San Jacinto College to continue enrollment in college-level courses.
4. Submit proof of current bacterial meningitis vaccination.

**Galena Park Career and Technical Education Early College High School - North Campus**

Galena Park Career and Technical Education Early College High School (GP CTE ECHS) is a partnership between San Jacinto College and Galena Park Independent School District (GPISD) at the North Campus. Participants in the program are chosen by a selection process established by GP CTE ECHS. Students classified as high school freshmen, sophomores, juniors and seniors enrolling in college-level courses as part of this program must meet the following requirements to be admitted for concurrent enrollment:

1. Submit a San Jacinto College admission application.
2. Submit official scores on TSI approved assessment test.
3. Meet the current academic standing rules of San Jacinto College to continue enrollment in college-level courses.
4. Submit proof of current bacterial meningitis vaccination.

**Pasadena Early College High Schools - Central and South Campuses**

Pasadena Independent School District (PISD) has five Early College High Schools through a partnership between San Jacinto College and PISD. Ninth- and 10th-grade students attend high school and college classes at the high school campus. Eleventh- and 12th-grade students from Memorial Early College High School, Pasadena Early College High School, and Sam Rayburn Early College High School attend high school and college courses at the San Jacinto College Central Campus. Eleventh- and 12th-grade students from Dobie Early College High School and South Houston Early College High School attend high school and college courses at the San Jacinto College South Campus. Participants in the program entering in their Ninth-grade year are chosen by a selection process established by PISD. Students classified as high school freshmen, sophomores, juniors and seniors enrolling in college-level courses as part of this program must meet the following requirements to be admitted for concurrent enrollment:

1. Submit a San Jacinto College admission application.
2. Submit official scores on TSI approved assessment test.
3. Meet the current academic standing rules of San Jacinto College to continue enrollment in college-level courses.
4. Submit proof of current bacterial meningitis vaccination.

### Other Early College Programs

**Modified Early College Academy (MECA) - North Campus**

Modified Early College Academy (MECA) is a two-year program for incoming high school juniors at the North Campus who have successfully completed Pre-AP Algebra II by the end of their sophomore year. Students in this program take four college courses each semester. In order to
complete an associate degree, additional course work is required. Courses can be completed in summer or mini terms or by taking evening or online classes. Students enrolling in college-level courses as part of this program must meet the following requirements to be admitted for concurrent enrollment:

1. Submit a San Jacinto College admission application.
2. Submit official scores on TSI approved assessment test or submit proof of exemption.
3. Meet the current academic standing rules of San Jacinto College to continue enrollment in college-level courses.
4. Submit proof of current bacterial meningitis vaccination.
5. Complete the MECA questionnaire and essay by the designated deadline.

**Admission Requirements for Individuals with F-1 Visa Status**

**F-1 Visa Initial Applicants**

San Jacinto College is authorized under federal law to enroll non-immigrant students.

International students residing outside the United States may be admitted to San Jacinto College and issued the U.S. Citizenship and Immigration Services (USCIS) Certificate of Eligibility (Form I-20) for F-1 Visa processing when all admission requirements have been met.

To complete the admission process, students must do the following:

2. Complete application for an I-20. For complete steps, refer to www.sanjac.edu/students-residing-outside-us.
3. Have all foreign secondary and college transcripts evaluated. The evaluation must show a secondary education that is equivalent to a U.S. high school diploma or higher. Students must submit official secondary school records and/or college/university transcripts to be evaluated by an approved foreign transcript evaluation agency. For a list of approved agencies, contact the International Student Services Office or visit www.sanjac.edu/international-students for more information.
4. Provide proof of financial ability. San Jacinto College requires financial support of $23,484 U.S. dollars annually. This is the estimated cost of educational and living expenses for one year at San Jacinto College. An additional $6,000 is required for the first dependent and $3,500 for each additional dependent. Students are required to submit documentation of these funds and currency exchange rates (if applicable). For more information refer to the Initial Admissions Checklist. Documentation of scholarships and fellowships may be in the form of an official award letter, and personal or family funds should be on bank letterhead stationery.
5. Provide proof of English proficiency. Students must meet requirements as listed under English Language Proficiency Requirement for Students Who are Speakers of Other Languages section in this catalog. Students meeting English language proficiency may be required to test for college readiness in reading, writing and math, unless exempt. (See section on Testing.)

Students must register full-time for courses in a specific degree plan to maintain F1 status.

A full-time course of study is 12 semester credit hours per term. One fall plus one spring semester constitutes one academic year.

**F-1 Visa Holder Sevis Transfer Applicants**

International students who are transferring from another United States college or university must submit the ABOVE admission documents as well as the following items:

1. Visa, passport and I-94 card.
2. All previous I-20s since initial entry into the United States.
3. Completed SEVIS Transfer Release Form. Must be filled out by the International Student Counselor/Advisor at the student’s current institution.
4. Official transcripts from all United States schools attended.
5. All students must be counseled by the International Student Services Office before registration and must follow the agreed-upon degree plan.

Transfer students who are out of status must contact the International Student Counselor/DSO prior to admission.

Transfer students on academic suspension must apply for suspension appeal in the Educational Planning, Counseling & Completion Office at South campus prior to admission. Transfer students admitted on
academic probation must earn at least a 2.0 GPA to maintain good academic standing.

Admission Requirements for Individuals with Other Types of Visas

Students with other types of visas or non-immigrant status may be eligible for admission. To determine eligibility contact the Admissions Office. Current B1/B2 visa holders are not eligible for admission under United States Department of Homeland Security regulations. (8 CFR 214.2(b)(7))

To be admitted, the student must apply for change of status:

1. Complete the online application for admission.
2. Have secondary and college transcripts evaluated. The evaluation must show a secondary education that is equivalent to a U.S. high school diploma. Students must submit official secondary school records and/or college/university transcripts to be evaluated by an approved foreign transcript evaluation agency. For a list of approved agencies, contact the Admissions Office or visit www.sanjac.edu/ international-students for more information.
3. Provide proof of English proficiency. Students must meet requirements as listed under English Language Proficiency Requirement for Students Who are Speakers of Other Languages section in this catalog. Students meeting English language proficiency may be required to test for college readiness in reading, writing and math, unless exempt. TOEFL and IELTS scores are valid for two years. (See section on Testing).
4. Provide Visa, passport and I-94 card or applicable proof of residency document.

All students who are enrolling for the first time will be counseled into appropriate levels of English, mathematics and reading based upon their state-approved test scores. (See the Residence Status for Tuition Purposes section to determine residency classification.)

Admission Requirements for Non-U.S. Citizens and Students without current Visa Status

San Jacinto College is committed to serving students and assisting them to reach their educational goals, regardless of citizenship status. Students who are not citizens of the United States and/or do not have a valid Visa status are eligible for admission.

English Language Proficiency Requirements for Students Who are Speakers of Other Languages

Individuals who were born outside the United States and whose native language is not English or those who have educational credentials from other countries or American protectorates must satisfy an English proficiency requirement as a condition of enrollment.

For enrollment into course work, students must document that they satisfy the English language proficiency requirement by one of the following accepted testing methods:

- TOEFL (Test of English as a Foreign Language), IELTS (International Language Testing System) or Exemptions (listed below).
- A student may be admitted to the ESOL Program with a minimum score of:
  - TOEFL 450 (Paper-Based Test), 45 (Internet-Based Test)
  - IELTS Band 4 range

Note: Students who score below the ESOL levels can improve their English through the non-credit ESL program which is taught through our Continuing and Professional Development division. This option is not available to F1 students.

A student may be admitted to an academic program with a minimum score of:

- TOEFL 525 (Paper-Based test), 70 (Internet-Based Test)
- IELTS Band 6 range

If outside of the U.S., submit an official TOEFL score. If inside the U.S., students may take the COMPASS-ESL exam at San Jacinto College. Once English Language proficiency is met, students will need to take the TSIA for academic course placement.

Our TOEFL I.D. for South Campus is 6730; North Campus is 6729; Central Campus is 6694.

Exemption from the English Language Proficiency Requirement may be granted due to:

- Two years attendance and graduation from U. S. High School and/or successful completion of college level English from a regionally accredited or committee approved U. S. college or university.

Note: A waiver of this requirement is extended, but not limited, to native students of the following countries: Australia, The Bahamas, Belize, Bermuda, Botswana, Cameroon, Cayman Islands, English-speaking Canadian provinces, The Fiji Islands, Gambia, Ghana, Guyana, Ireland, Jamaica, Kenya, Liberia, Malta, Nauru, Nigeria, New Zealand, Sierra Leone, Singapore, Solomon Islands, South Africa, Sri Lanka, Tanzania, Tobago Trinidad, Uganda, United Kingdom, The Virgin Islands, the West Indies, Zambia and Zimbabwe.

F1 Students:

F1 students required to enroll in the ESOL Program cannot fulfill the English Language Proficiency requirement by enrolling in Continuing and Professional Development (CPD) ESL/ESOL courses.

English for Speakers of Other Languages (ESOL) Program

The ESOL program is a credit program of developmental study designed to prepare non-English speakers for admission to college-level course work.

The ESOL Program does not fall under the provisions of the Texas Success Initiative (TSI). To move from the ESOL developmental program and to enroll in college-credit courses, students must have the recommendation of the ESOL program director and/or must document that they have met the English language proficiency requirement and complete the state approved TSI assessment exam. (See the section titled English Language Proficiency Requirement for Students Who are Speakers of Other Languages.) F1 students cannot enroll in Continuing
Orientation and Campus Tours

and Professional Development (CPD) ESL/ESOL courses to fulfill English language proficiency.

Accuplacer ESL Testing Requirement
To be admitted to the ESOL program, all students must obtain the required minimum score of Accuplacer ESL 60 (Reading); 53 (Listening); 53 (Sentence Meaning); 2 (WritePlacer) and meet the requirements for one of the following types of admission. Students who cannot submit the minimum passing scores on one or two sections of the Accuplacer-ESL test may be admitted into the non-credit ESL courses sponsored through the Continuing and Professional Development office. Upon recommendation of the ESL program director, students may retest on the Accuplacer ESL and reapply for admission to the ESOL program.

ESOL Program Admission Types
There are two types of admission into the credit ESOL program.

High School Graduation or the Equivalent
Students whose native language is not English and who have graduated from high schools outside the United States or who have taken and passed all parts of any foreign language version of the High School Equivalency test are eligible for unconditional admission only into the ESOL program if they provide documentation of high school graduation or the equivalent and if they meet the Accuplacer ESL testing requirement.

College or University Transfer Students
Students transferring to San Jacinto College from other colleges and universities whose native language is not English must document that they have met the English language proficiency requirements. Students who do not meet the English Proficiency Requirements are eligible for admission only to the ESOL program if they meet the Accuplacer-ESL testing requirements.

AccuPlacer ESL Placement Chart
Reading & Writing

<table>
<thead>
<tr>
<th>Reading Score</th>
<th>WritePlacer Score</th>
<th>Course Placement</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>59 or below</td>
<td>1 or 0</td>
<td>CPD ESL</td>
<td>Continuing &amp; Professional Development ESL</td>
</tr>
<tr>
<td>60-70</td>
<td>2</td>
<td>ESOL 0351</td>
<td>Introductory Composition for Non-Native Speakers</td>
</tr>
<tr>
<td>71-89</td>
<td>3 or 4</td>
<td>ESOL 0372</td>
<td>Intermediate Reading &amp; Writing for Non-Native Speakers</td>
</tr>
<tr>
<td>90-109</td>
<td>5</td>
<td>ESOL 0373</td>
<td>Advanced Reading &amp; Writing for Non-Native Speakers</td>
</tr>
<tr>
<td>110 or above</td>
<td>6</td>
<td>TSIA Ready</td>
<td></td>
</tr>
</tbody>
</table>

Grammar

<table>
<thead>
<tr>
<th>Sentence Meaning Score</th>
<th>Language Use Score</th>
<th>Course Placement</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 or below</td>
<td>52 or below</td>
<td>CPD ESL</td>
<td>Continuing &amp; Professional Development ESL</td>
</tr>
<tr>
<td>53-85</td>
<td>53-85</td>
<td>ESOL 0382</td>
<td>Intermediate Grammar for Non-Native Speakers</td>
</tr>
<tr>
<td>86-108</td>
<td>86-108</td>
<td>ESOL 0383</td>
<td>Advanced Grammar for Non-Native Speakers</td>
</tr>
<tr>
<td>109 or above</td>
<td>109 or above</td>
<td>TSIA Ready</td>
<td></td>
</tr>
</tbody>
</table>

1 The placement of Reading & Writing and Grammar is based on two sets of scores each. If a discrepancy occurs, the lower score will be the determinant. For example, if a student scores 75 in Reading and 5 in WritePlacer, he or she will be placed in ESOL 0372 Intermediate Reading and Writing for Non-Native Speakers instead of the higher level ESOL 0373 Advanced Reading and Writing for Non-Native Speakers.

Oral Communication (Listening & Speaking)

<table>
<thead>
<tr>
<th>Listening Scores</th>
<th>Course Placement</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 or below</td>
<td>CPD ESL</td>
<td>Continuing &amp; Professional Development ESL</td>
</tr>
<tr>
<td>53-72</td>
<td>ESOL 0362</td>
<td>Intermediate Oral Communication for Non-Native Speakers</td>
</tr>
<tr>
<td>73-92</td>
<td>ESOL 0363</td>
<td>Advanced Oral Communication for Non-Native Speakers</td>
</tr>
<tr>
<td>93 or above</td>
<td>TSIA Ready</td>
<td></td>
</tr>
</tbody>
</table>

Orientation and Campus Tours

The mission of Orientation and Campus Tours is to provide quality programming, support services and resources to facilitate a seamless transition for first time in college and transfer students. Through specifically designed events and communication, Orientation and Campus Tours promotes student development, persistence and academic success.

The Orientation and Campus Tours office plans and coordinates mandatory campus and online New Student Orientation (NSO) before each fall, spring and summer term. The purpose of NSO is to foster student success, establish social and academic connections, introduce college resources and engage students in the San Jacinto College culture in a fun, supportive environment.

After being admitted, students are required to register for New Student Orientation through SOS at www.sanjac.edu/SOSlogin.

New Student Orientation sessions offer an opportunity for incoming students to ask questions, tour the campus and meet faculty, staff and students. Limited space is available at each session.
Testing

Campus Testing Centers

Campus Testing Centers offer CLEP, BENNETT Mechanical assessment, Accuplacer ESL, computer skills placement, upper level math placement, final exams, Texas high school equivalency exams (GED and HiSET), (Central only) HESI, (North and Central only) SAT, (North and Central only) ACT and TSIA (Texas Success Initiative Assessment) exams. Please contact the nearest Testing Center for dates and times.

Taking the TSIA Exam

San Jacinto College uses the TSIA exam to determine your college readiness levels in math, reading and writing. Before you meet with an advisor and attend new student orientation, it’s important that you take this exam. Your test scores will determine if you are ready for college-level courses, or need college preparatory courses. Testing takes place at your campus of choice, and can usually be completed in three to four hours. You will need to complete the TSIA Pre-Assessment Activity before going to Admissions for a Testing Request Form. www.sanjac.edu/PAA.

Texas Certificate of High School Equivalency (TxCHSE)

San Jacinto College currently administers the GED and HiSET High School Equivalency test for the Texas Certificate of High School Equivalency. For more information about the High School Equivalency, please visit ged.com (http://ged.com) or https://hiset.ets.org/.

Transfer Credit by Examination

Mail the official copy of Advanced Placement (AP), College Level Examination Program (CLEP) and International Baccalaureate (IB) to Records Management at the South Campus for processing. A student must earn at least three credit hours of course work at San Jacinto College before transfer credit will post to the student’s transcript.

Texas Success Initiative

To use scores from any assessment other than the TSI, students must have a transcript from a regionally accredited college or university indicating complete course work. Effective Aug. 26, 2013, students must take the Texas Success Initiative Assessment (TSIA).

Texas Success Initiative (TSI) College Preparatory

The Texas Success Initiative (TSI) became effective Sept. 1, 2003. This initiative replaces the Texas Academic Skills Program (TASP) and is in effect for students who register and pay prior to August 26, 2013.

Students enrolling for the first time in college after August 26, 2013 fall under the revised Texas Success Initiative which requires that incoming students, unless exempt, be assessed for college readiness in the areas of reading, mathematics and writing by the TSIA. This initiative further requires that students who do not meet the passing standard of an area of the assessment not be allowed to enroll in college-level classes requiring skills in the unmet area until those college readiness skills are met. Students can meet the skills requirement by completing the sequence of college preparatory courses for that area or by passing a retest of the assessment instrument. Students should meet with an educational planner/counselor to develop their individual college preparatory education plan which will include: when college preparatory studies must begin, the sequence of required college preparatory courses, possible retesting, study skills and other options for developing college readiness.

The placement chart, published in this catalog, indicates the various skills prerequisite levels, their corresponding score ranges on the placement tests and either the college preparatory courses in which students must enroll or the college-level English or mathematics courses in which they may enroll if they meet the skill level requirement. The placement chart also indicates the college preparatory course sequence for each skill area.

Exemptions from the Texas Success Initiative

Students are exempt from the provisions of the Success Initiative if they have met one of the following conditions:

• Enrolling in a Level 1 technical certificate or occupational certificate program.
• Have graduated with an associate degree or higher from a regionally accredited institution of higher education.
• Are serving on active duty as a member of the Armed Forces of the United States, in the Texas National Guard or as a member of a Reserve unit of the Armed Forces of the United States and have been serving for at least three years preceding enrollment; or have been honorably discharged, retired or released on or after Aug. 1, 1990.
• SAT Testing prior to March 5, 2016 – Students who took the SAT test prior to March 5, 2016 may use the following scores: Combined critical reading (formerly “verbal”) and mathematics score of 1070 with a minimum of 500 on the critical reading test shall be exempt for both reading and writing sections of the TSI Assessment, and/or 500 on the mathematics tests shall be exempt for the mathematics section of the TSI Assessment.
• SAT minimum score of 480 on the Evidenced-Based Reading and Writing (EBRW) test shall be exempt for both reading and writing sections of the TSI Assessment; a minimum score of 530 on the mathematics test shall be exempt for the mathematics section of the TSI Assessment. There is no combined score.
• Exit-level TAKS mathematics score of 2,200 or higher and a language arts score of 2,200 or higher with an essay score of 3 or higher. Scores are valid for five years from the date of testing.
• Transfer from a regionally-accredited institution of higher education and have satisfactorily (with a grade of D or higher) completed college-level course work related to a skill area(s). Students who have not completed course work related to all skill areas must be assessed in the unmet area(s) and must participate in college preparatory studies if the area(s) is not met on the test.
• Have attended any regionally accredited institution of higher education and have been determined to have met readiness standards by that institution. This includes passing scores on an approved assessment instrument, a previous determination of college readiness (exemption) under the TASP or the completion with grades of C or higher of college preparatory studies at that institution.

Note: Degrees from non-English speaking foreign institutions and non-regionally accredited institutions do not qualify a student for an exemption of the TSI.
Partial Exemption Based on SAT, ACT, TAKS, STAAR

Students who do not meet all-area exemption standards on one of the above tests are considered to be exempt in the individual areas where the composite and area standard is met. Partial exemptions based on the SAT, ACT, STAAR or exit-level TAKS are as follows:

<table>
<thead>
<tr>
<th>Reading and Writing</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Composite 23+ and ACT</td>
<td>ACT Composite 23+</td>
</tr>
<tr>
<td>English 19+</td>
<td>ACT Mathematics 19+</td>
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<tr>
<td>SAT taken before March 2016</td>
<td>SAT taken before</td>
</tr>
<tr>
<td>Composite 1,070+</td>
<td>March 2016</td>
</tr>
<tr>
<td>Verbal (Critical Reading)</td>
<td>Composite 1,070+</td>
</tr>
<tr>
<td>500+</td>
<td>Mathematics 500+</td>
</tr>
<tr>
<td>SAT taken after March 2016</td>
<td>SAT taken after</td>
</tr>
<tr>
<td>Reading and Writing 480+</td>
<td>March 2016</td>
</tr>
<tr>
<td>TAKS Language Arts 2,200+</td>
<td>TAKS Mathematics</td>
</tr>
<tr>
<td>Essay of 3+</td>
<td>2,200+</td>
</tr>
<tr>
<td>STAAR EOC English III 4,000+</td>
<td>STAAR Algebra II</td>
</tr>
<tr>
<td></td>
<td>4,000</td>
</tr>
</tbody>
</table>

Students who are partially exempt based on the ACT, SAT, TAKS or STAAR must test for TSI purposes in the areas where they are not exempt prior to enrolling for any courses.

Waived Certificate Programs

Students who enroll in a waived certificate program (level I certificates of technology or occupational certificates) are not exempt from required assessment but are waived from required college preparatory studies while enrolled in their waived program. However, they are restricted to enrollment in only those courses within the waived program and must meet course related skill level requirements.

TSI Requirements Deferred for Students Who are not Seeking a Degree or Certificate

Students who declare that they are not seeking a degree or certificate may defer both the required assessment (testing) and college preparatory education provisions of the TSI. However, they may accumulate no more than 15 term hours of college-level credit while they delay these provisions. Once students have earned 15 college-level credit hours, they must meet all TSI requirements. To delay assessment and college preparatory studies, students must meet with an educational planner/counselor to declare that they are not seeking a degree or certificate and be assigned the appropriate status. Students with this status must meet all course skill prerequisites; thus, assessment may be required. Students in this non-degree seeking status are not eligible for state or federal financial aid.

College Preparatory Courses

Students Who Enrolled in College Prior to Fall 2010

The college preparatory program provides a path for students who are not college-ready. This is based on a TSI assessment to determine college-readiness. It is the College's policy that students who are not college-ready in an area(s) (reading, writing, math) must begin college preparatory courses at their first enrollment and must continue enrolling in at least one college preparatory class each semester until they are college-ready in all areas.

Students Enrolling in College for the First time Fall 2010 through Summer 2012

The following rules must be followed by students when enrolling in college preparatory courses:

1. A student who is not college-ready in reading must first enroll in the required college preparatory reading course. If the student enrolls in a second course, it must be GUST 0305 College Student Success. The student can then enroll in other courses for which he or she has met the required skills/course prerequisites.

2. A student who is college-ready in reading, but is not college-ready in either writing or mathematics or both must first enroll in the required college preparatory course in either area. If the student enrolls in a second course, it must be GUST 0305 College Student Success. The student can then enroll in other courses for which he or she has met the required skills/course prerequisites.

3. Students must begin college preparatory courses at their first enrollment and must continue enrolling in at least one college preparatory class each semester until they are college-ready in all areas.

Students Enrolling in College for the First Time Fall 2012 or Thereafter

1. A student who is not college-ready in reading or writing must first enroll in the required college preparatory integrated reading and writing (INRW) course. If a student enrolls in a second course, it must be GUST 0305 College Student Success, College Student Success. The student may then enroll in other courses for which he or she has met the required skills/course prerequisites.

2. A student who is NOT college-ready in reading OR writing, and not college-ready in math must enroll in the required college preparatory requirements in reading and writing first, then GUST 0305 College Student Success and then enroll in MATH requirements. The student may then enroll in other courses for which he or she has met the required skills/course prerequisites.

3. A student who is college-ready in reading AND writing but not college-ready in math, must enroll in the required college preparatory math course. The student must enroll in either GUST 0305 College Student Success, EDUC 1300 Learning Framework or PSYC 1300 Learning Framework before registering for his or her 10th college credit.

4. Students must begin college preparatory courses at their first enrollment and must continue enrolling in at least one college preparatory class each semester until they are college-ready in all areas.

5. A student who transfers between 0 to 11 hours of college-level credit to San Jacinto College will be required to enroll in GUST 0305 College Student Success, EDUC 1300 Learning Framework or PSYC 1300 Learning Framework. Students with 12 or more hours of college-level credits are not required to enroll in a student success course.

6. Students required to take the Learning Framework course must enroll in the course before enrolling in their 10th college-level credit hour.

7. Students who do not successfully complete a Student Success course will be required to re-enroll in the course the following semester.

Advising – College Preparatory Studies

Advising on college preparatory education and degree or certificate program options is always available to students at San Jacinto College. At certain times advising is required. Entering students who are not exempt and who have not met TSI testing requirements must see an
San Jacinto College

educational planner/counselor or admissions advisor to determine if they must take an assessment test and to obtain a Testing Referral Form.

Skills Prerequisites

Many courses have minimum levels of skill in reading, writing and/or mathematics stipulated as prerequisites. These prerequisites constitute conditions of enrollment for all students coming under the provisions of the TSI and cannot be waived. They are stated in terms of numerical levels which correspond with certain ranges of scores on the placement tests. To satisfy a course skills prerequisite, students must score within the range of scores corresponding to the indicated level.

Student Initiated Withdrawal from Required College Preparatory Studies

Students enrolled in college preparatory studies may, under certain exceptional circumstances and for one term only, withdraw from one required college preparatory course but must meet with an educational planner/counselor to discuss their individual college preparatory education program. This conference should explore the consequences of withdrawing, such as delayed college readiness, restriction from college-level courses with required skill prerequisites, delayed entry into programs of study requiring certain skill levels and other factors affecting the student's educational objectives. Students are required to continue with their college preparatory studies program at their next registration and will not be permitted to subsequently withdraw from required college preparatory studies.

Texas Success Initiative Assessment (TSIA)

The TSIA Mathematics and Statistics Test is a multiple choice assessment that covers the key College and Career Readiness Standards, which includes Elementary Algebra and Functions, Intermediate Algebra and Functions, Geometry and Measurement and Data Analysis, Statistics and Probability. There are approximately 20 items on the placement test and 10 items per category on the diagnostic test.

The TSIA Writing Test is a multiple choice assessment that covers the key College and Career Readiness Standards, which include essay revision, agreement, sentence structure and sentence logic. There are approximately 20 items on the placement test and 10-12 items per category on the diagnostic test.

The Texas College and Career Readiness Writing standards asks students to write essays that "demonstrate clear focus, the logical development of ideas in well-organized paragraphs and the use of appropriate language that advances the author's purposes." WritePlacer automatically evaluates students' essays written to one of several prompts. WritePlacer essays are electronically scored by the Intelligent Essay Assessor (IEA) that is powered by the Knowledge Technologies (KT) engine. Feedback is provided on the following dimensions: purpose and focus, organization and structure, development and support, sentence variety and style, mechanical conventions and critical thinking.

Texas Success Initiative Assessment Placement Chart

Beginning Aug. 26, 2013, all degree-seeking students, unless otherwise exempt, must have taken the TSIA before enrolling for classes. The scores on the TSIA test will determine skill level assignments. The skill levels will determine the college preparatory courses that must be completed with a grade of C" or better to progress to the next level or to become college-ready.

<table>
<thead>
<tr>
<th>Reading Scores</th>
<th>Skill Level</th>
<th>Appropriate Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 342</td>
<td>Skill level 2</td>
<td>Intentional Connections (READ 0308; ENGL 0306)</td>
</tr>
<tr>
<td>342-346</td>
<td>Skill level 4</td>
<td>INRW 0301</td>
</tr>
<tr>
<td>347-350</td>
<td>Skill level 6</td>
<td>INRW 0302</td>
</tr>
<tr>
<td>351 or higher</td>
<td>Skill level 7</td>
<td>Review Writing Score</td>
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<table>
<thead>
<tr>
<th>Writing Scores</th>
<th>Skill Level</th>
<th>Appropriate Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 350 (no essay)</td>
<td>Skill level 2</td>
<td>Intentional Connections (READ 0308; ENGL 0306)</td>
</tr>
<tr>
<td>350-356 (no essay)</td>
<td>Skill level 4</td>
<td>INRW 0301</td>
</tr>
<tr>
<td>357-362 (no essay)</td>
<td>Skill level 6</td>
<td>INRW 0302</td>
</tr>
<tr>
<td>Essay score 5 or essay score of 4 and multiple choice 340 or higher</td>
<td>Skill level 7 and College ready in Reading</td>
<td>ENGL 1301</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics:Non-Algebraic Path Scores</th>
<th>Skill Level</th>
<th>Appropriate Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 336</td>
<td>Skill level 4</td>
<td>Math Foundation Course MATH 0332 or MATH 0342</td>
</tr>
<tr>
<td>336-349</td>
<td>Skill level 4</td>
<td>Math Foundation Course MATH 0332 or MATH 0342</td>
</tr>
<tr>
<td>350 or higher</td>
<td>Skill level 8</td>
<td>MATH 1332 or MATH 1342 - College Level</td>
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</table>

<table>
<thead>
<tr>
<th>Mathematics:Algebraic Path Scores</th>
<th>Skill Level</th>
<th>Appropriate Course</th>
</tr>
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<td>Less than 336</td>
<td>Skill level 4</td>
<td>MATH 0104</td>
</tr>
<tr>
<td>336-349</td>
<td>Skill level 6</td>
<td>Math Foundation Course MATH 0314 or MATH 0324</td>
</tr>
<tr>
<td>350 or higher</td>
<td>Skill level 9</td>
<td>MATH 1314 or MATH 1324 - College Level</td>
</tr>
</tbody>
</table>
EDUCATIONAL PROGRAMS

- Associate Transfer Degrees (p. 326)
- Core Options for Technical Degrees (p. 327)
- Course Information (p. 328)
- Field of Study (p. 330)
- Major Codes - Technical Degrees and Certificates (p. 330)
- Technical Degrees and Certificates (p. 334)
- “The Basics” Core Curriculum/General Education Outcomes (p. 335)

Associate Transfer Degrees

San Jacinto College offers a variety of certificates and degrees. Students are encouraged to complete the requirements of an associate degree at San Jacinto College even if they are planning to transfer to another college or university to complete a baccalaureate degree. One advantage of completing a degree is the fact that this action reflects commitment to a specific educational goal and success in meeting that goal. Earning an associate degree is evidence of taking one definable step beyond a high school diploma or the high school equivalency examination, and it is the minimum educational requirement for employment in certain positions in area businesses and industries. The associate of arts (A.A.) and the associate of science (A.S.) degrees are designed for students who plan to transfer to a four-year or upper-level college or university. This type of degree includes general education courses such as English, mathematics, history, and government, which are considered to be core requirements for most baccalaureate degree programs. Many students refer to these courses as “the basics.” (See The Basics—Core Curriculum section).

An associate degree has three parts:

1. a 42-semester credit hour (SCH) core curriculum, which provides general education;
2. a 6-hour institutional option; and
3. a 12-hour transfer path, which collectively leads to the 60-hour associate degree.

Associate of Arts Degree

Four-year and upper-level colleges and universities offer majors within the baccalaureate degree. San Jacinto College offers many courses in the transfer path that would meet the requirements of a major. Students may prepare to transfer to a particular program at an upper-level institution by either:

1. completing the core requirements of the associate degree at San Jacinto College and selecting courses in their transfer path that will lead to a major for the baccalaureate, or
2. selecting courses as specified in the transfer plans developed by San Jacinto College in cooperation with upper-level institutions to which students transfer.

Those plans, which are available in the Educational Planning, Counseling & Completion office on each San Jacinto College campus, are designed to prepare students to transfer to a particular four-year or upper-level college or university by specifying the courses required to complete the first two years of a baccalaureate degree in a particular major.

Students choosing to pursue an associate of arts degree should select from among general studies, social and behavioral science, business administration, fine arts, communication or kinesiology.

- Business (1BUSINESS) (p. 39)
- Communications (1COMM) (p. 13)
- Fine Arts (1FINEARTS) (p. 16)
- General Studies (1G-STUDY) (p. 297)
- Kinesiology (1KINE) (p. 174)
- Social & Behavioral Sciences (1SOC-BEHV) (p. 299)

Associate of Arts in Teaching Degree

The Associate of Arts in Teaching (A.A.T.) is a Texas Higher Education Coordinating Board-approved collegiate degree program consisting of lower-division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The A.A.T. degree, as defined by the Coordinating Board, is fully transferable to all Texas public universities. Because the A.A.T. fulfills the requirements of the field of study curriculum statutes and Coordinating Board rules, all Texas public universities must accept the A.A.T. curricula if they offer the applicable baccalaureate degrees leading to initial teacher certification.

Students who complete the A.A.T. will be required to meet any and all entrance requirements of the receiving university and the educator preparation program, including grade point averages and/or testing requirements.

- Teaching - Early Childhood to 6th Grade (1TEACH-EC6) (p. 146)
- Teaching - Grades 7 to 12, (1TEACH7-12) (p. 149)

Associate of Arts in Music

The Texas Higher Education Coordinating Board allows a community college to combine a Field of Study (FOS) and a portion of the core curriculum, including government and history, to create a 60 SCH degree. The Associate of Arts in Music is a combination of the Music FOS and the College core curriculum.

It has been designed to apply to Bachelor of Music (B.M.), Bachelor of Arts (B.A.), Bachelor of Music Education (B.M.Ed.) or other baccalaureate-level music degrees as deemed appropriate by the awarding institution.

- Music (1MUSIC) (p. 21)

Associate of Science Degree

The associate of science degree (A.S.) is designed for students who plan to transfer to a four-year or upper-level college or university and major in mathematics, one of the sciences (biology, chemistry, geology, physics, biotechnology or related field), engineering or computer science. (See the Core Curriculum and Field of Study sections.) The associate of science degree differs from an associate of arts degree in the amount or level of mathematics and science required for degree completion. A minimum of 12 hours of mathematics, 12 hours in science, or 12 hours in computer sciences beyond the core requirement will be required for the degree. Please note the Field of Study associate of science degree options contain state-required courses recommended for the degree.

Students seeking an associate of science degree should take science courses designed for majors rather than courses for non-majors. Science courses designed for allied health students are not intended for academic transfer towards a science major.
Students choosing to pursue an associate of science degree should select from among life science, physical science, computer science or mathematics. However, courses designed for non-majors (BIOL 1308 Biology for Non-Science Majors I (Lecture)/BIOL 1108 Biology for Non-Science Majors I (lab), BIOL 1309 Biology for Non-Science Majors II (Lecture)/BIOL 1109 Biology for Non-Science Majors II (lab), and CHEM 1305 Introductory Chemistry I (lecture)/CHEM 1105 Introductory Chemistry I (lab)) do not apply to an A.S. degree. They are recommended for the associate of arts degrees.

- Computer Science (2COSCI) (p. 276)
- Life Sciences (2LIFESCI) (p. 290)
- Mathematics (2MATH) (p. 292)
- Physical Sciences (2PHYSSCI) (p. 294)

**Associate of Science in Engineering Degree**

The Associate of Science in Engineering is a Texas Higher Education Coordinating Board-approved collegiate degree consisting of lower-division courses intended for transfer to baccalaureate programs that lead to an engineering degree. The Associate of Science in Engineering, as defined by THECB, is fully transferrable to Texas public universities, which participate in the Tuning In Texas articulation agreement (transfer compact).

It is recommended students seek the advice of an educational planner. Students who complete the Associate of Science in Engineering, will be required to meet any and all entrance requirements of the receiving institution, including grade point averages and/or testing requirements.

- Engineering (2ENGINEER) (p. 289)

**Associate of Applied Science**

An A.A.S. degree is awarded to students who complete 60 semester credit hours of technical requirements as outlined in the Technical Programs section of the Catalog, including 15 semester credit hours of general education courses. Programs may only exceed 60 SCH with an exemption from the Texas Higher Education Coordinating Board.

**Enhanced Skills Certificate**

The Enhanced Skills Certificate is considered to be a continuation of the associate of applied science degree program. Therefore, in order to qualify for the Enhanced Skills Certificate, the student must complete all of the A.A.S. requirements for the degree as well as at least 6 and no more than 12 semester credit hours required for the certificate. A course for which credit has been earned may not fulfill a requirement for both the degree and certificate. Each course earned can fulfill only one course requirement in the continuum of courses required, and no single course will count for both degree and certificate purposes. For courses which may be repeated multiple times for credit, the course may be utilized, as appropriate, as many times as credit is earned. Substitution for specified courses required in the enhanced skills certificate is not allowed. Completion of an Enhanced Skills Certificate does not qualify students to participate in the commencement ceremony.

**Advanced Technical Certificate**

An advanced technical certificate is a certificate that has a defined associate or baccalaureate degree as a prerequisite, consisting of at least 16 and no more than 45 semester credit hours. It is focused and clearly related to the prerequisite degree, and meets industry or external agency requirements. An advanced technical certificate is attached to an A.A.S. degree in the same program area as the A.A.S. degree. An A.A.S. degree program provides a shortened track for students who already hold a related degree.

**Continuing and Professional Development Certificate Programs**

A Continuing and Professional Development (CPD) certificate program is a grouping of related Continuing and Professional Development courses which, when successfully completed, provide a level of technical and occupational skills acceptable by the industry standard for that field. A Continuing Education Unit Certificate (CEU) is 360-779 contact hours and has a coherent sequence of technical CEU courses.

**Core Options for Technical Degrees**

**Communications**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2311</td>
<td>Technical and Business Writing</td>
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**Mathematics**

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<td>MATH 1314</td>
<td>College Algebra</td>
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<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences</td>
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</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Elementary Statistical Methods (Statistics)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2318</td>
<td>Linear Algebra</td>
<td>3</td>
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<tr>
<td>MATH 2320</td>
<td>Differential Equations</td>
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<tr>
<td>MATH 2412</td>
<td>Pre-Calculus Math</td>
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<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
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<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
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**Life and Physical Sciences (Natural Science)**

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<tbody>
<tr>
<td>ASTR 1303</td>
<td>Stars and Galaxies (lecture)</td>
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</tr>
<tr>
<td>ASTR 1304</td>
<td>The Solar System (lecture)</td>
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<tr>
<td>BIOL 1306</td>
<td>Biology for Science Majors I (Lecture)</td>
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<tr>
<td>BIOL 1307</td>
<td>Biology for Science Majors II (Lecture)</td>
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<tr>
<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (Lecture)</td>
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<td>BIOL 1309</td>
<td>Biology for Non-Science Majors II (Lecture)</td>
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<td>BIOL 1311</td>
<td>General Botany</td>
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<td>BIOL 1313</td>
<td>General Zoology (Lecture)</td>
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<td>BIOL 2301</td>
<td>Human Anatomy and Physiology I (Lecture)</td>
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<tr>
<td>BIOL 2302</td>
<td>Human Anatomy and Physiology II (Lecture)</td>
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<td>CHEM 1305</td>
<td>Introductory Chemistry I (lecture)</td>
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</tr>
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<td>CHEM 1311</td>
<td>General Chemistry I (lecture)</td>
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<td>Earth Sciences for Non-Science Majors I (lecture)</td>
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### Course Information

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### Language, Philosophy, and Culture (Humanities)

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<td>ENGL 2333</td>
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<tr>
<td>ENGL 2341</td>
<td>Literature and Film</td>
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<td>Mexican American Literature</td>
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<td>GEOG 1302</td>
<td>Human Geography</td>
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<tr>
<td>HIST 2321</td>
<td>World Civilization I</td>
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<td>Introduction to the Humanities I</td>
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### Creative Arts (Fine Arts)

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<td>Art History I (Prehistoric to the 14th century)</td>
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<td>ARTS 1304</td>
<td>Art History II (14th century to the present)</td>
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<td>Dance Appreciation</td>
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<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
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<td>DRAM 2366</td>
<td>Introduction to Cinema: Film Appreciation I</td>
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<td>MUSI 1306</td>
<td>Music Appreciation</td>
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<td>Music Literature</td>
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<td>MUSI 1310</td>
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### American History

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### Government/Political Science

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<td>ANTH 2346</td>
<td>General Anthropology</td>
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<td>ANTH 2351</td>
<td>Cultural Anthropology</td>
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<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
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<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
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<td>GEOG 1303</td>
<td>World Regional Geography</td>
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<td>GOVT 2304</td>
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<td>HIST 2311</td>
<td>Western Civilization I</td>
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<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
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<td>SOCI 2319</td>
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### Index to Subjects

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<td>BMGT, BUSG, HRPO, MRKG</td>
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<td>CDEC, TECA</td>
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<td>Eye Care Technology</td>
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<td>FIRS, FIRT</td>
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<td>Foreign Languages</td>
<td>See Modern Languages</td>
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<td>Geography</td>
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<td>Global Logistics and Supply Chain Management</td>
<td>HMSY, IBUS, LMGT</td>
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<td>Health Information Management</td>
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<td>HUMA</td>
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<td>Instrumentation Technology</td>
<td>CTEC, NETC, ENER, EPCT, INCR, INTC, OSHT, TECM</td>
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<td>Interior Design</td>
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<td>International Business, Logistics &amp; Maritime</td>
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<td>HLAB, MLAB, PLAB, SCIT</td>
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<td>Mexican American Studies</td>
<td>HUMA</td>
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<tr>
<td>Military Science</td>
<td>AFSC, MSC</td>
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</table>
semester hours of credit. Third and fourth digits uniquely identify the course.

Course Title: Descriptive title for transcript

Description: A short description of the course content.

Course Prerequisites: Courses or basic skill levels as defined by Texas Success Initiative required before enrollment.

(SCH:LEC-LAB): SCH = Semester credit hours of the course; LEC = Lecture contact hours per week for a 16-week course; LAB = Lab contact hours in a 16-week course.

Listed on the following pages are the course descriptions for classes available at San Jacinto Community College. The descriptions will help you choose courses which best fit your degree plan, career goals, and/or transfer requirements.

The information about each course includes the course rubric and number, title, a brief description, any prerequisites or co-requisites, the semester credit hour and the weekly lecture and/or lab hours.

An Index to Disciplines and an Index of Course Rubrics are located on the front part of this section along with helpful definitions.

Note: Courses may not be offered online every semester

Field of Study

Field of study curricula were mandated in Senate Bill 148 of the 75th Texas Legislature (1997). Core curricula and field of study curricula are intended to facilitate free transferability of lower-division academic courses among Texas public colleges and universities, if a student successfully completes a field of study curriculum. Fields of study are developed by the Texas Higher Education Coordinating Board, but not for all majors. The block of courses in the field of study may be transferred to a general academic teaching institution in Texas and must be substituted for that institution's lower-division (freshman and sophomore level) requirements for the degree program in that field of study. The student will receive full academic credit toward the degree program for the block of courses transferred.

A student who transfers from one institution of higher education to another, without completing all courses in the field of study curriculum at the sending institution, will receive academic credit in the field of study curriculum of the receiving institution for each of the courses that the student has successfully completed. Following receipt of credit for these courses, the student may be required to satisfy the remaining course requirements in the field of study curriculum at the receiving institution. A student concurrently enrolled at more than one institution of higher education should follow the field of study curriculum requirements of the institution at which the student is classified as a degree-seeking student.
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<td>5AUTO-F</td>
<td>Automotive Technology-Ford Level 2 Certificate</td>
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<td>3AUTO-F</td>
<td>Automotive Technology-Ford Associate of Applied Science</td>
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<tr>
<td>3AUTO-G</td>
<td>Automotive Technology-GM Associate of Applied Science</td>
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<td>5AUTO-H</td>
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<td>Automotive Technology-Honda Associate of Applied Science</td>
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<td>5AUTO-TTEN</td>
<td>Automotive Technology-Toyota Technician Training &amp; Education Network (TTEN) Level 2 Certificate</td>
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<td>Automotive Technology-Toyota Technician Training &amp; Education Network (TTEN) Associate of Applied Science</td>
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<td>5BIOMD-CET</td>
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<td>4BMGT-ENTR</td>
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<td>6BMGT-MRKG</td>
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<td>4BMGT-RTLM</td>
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<td>5BOFT-E</td>
<td>Business Office Systems and Support - Executive Administrative Level 2 Certificate</td>
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<td>Computer Information Technology - Web Application Development</td>
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<td>3CRIJ</td>
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<td>4CULA</td>
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<td>4CULA-PC</td>
<td>Culinary Arts-Pastry Chef Specialty Certificate of Technology</td>
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<td>Culinary Arts-Pastry Chef Specialty Associate of Applied Science</td>
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<td>4CULA-RSTR</td>
<td>Culinary Arts-Restaurant Management Certificate of Technology</td>
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<td>Diesel Technology - Heavy Power Associate of Applied Science</td>
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<td>4DESL-HTR</td>
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<td>3DESL-HTR</td>
<td>Diesel Technology - Heavy Truck Associate of Applied Science</td>
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<td>6DIET-SFSV</td>
<td>Dietetics-School Food Service Specialty Occupational Certificate</td>
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<td>6ELEC-TEC</td>
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<td>ELEC-CAE</td>
<td>Electrical Technology Communication and Alternative Energy Enhanced Skills Certificate</td>
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<td>Electronics Communications Technology Occupational Certificate</td>
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<td>4DFT-A</td>
<td>Engineering Design Graphics- Architectural/Civil/Structural Certificate of Technology</td>
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<td>Engineering Design Graphics- Architectural/Civil/Structural Specialty Level 2 Certificate</td>
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<td>4DFT-PI</td>
<td>Engineering Design Graphics-Petro/Industrial Specialty Certificate of Technology</td>
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<td>Engineering Design Graphics-Petro/Industrial Specialty Level 2 Certificate</td>
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<td>3DFT-PI</td>
<td>Engineering Design Graphics-Petro/Industrial Specialty Associate of Applied Science</td>
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<td>5ENVR-HLTH</td>
<td>Environmental Health and Safety Technology Level 2 Certificate</td>
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<td>3ENVR-HLTH</td>
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<td>6EYE-PREP</td>
<td>Optician Preparatory Occupational Certificate</td>
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<td>4EYE</td>
<td>Eye Care Technology Certificate of Technology</td>
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<td>3EYE</td>
<td>Eye Care Technology Associate of Applied Science</td>
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<td>4FIREFTG</td>
<td>Fire Protection Technology Certificate of Technology</td>
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<td>3FIRE-PROT</td>
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<td>EFIRE-CHOF</td>
<td>Chief Officer Enhanced Skills Certificate</td>
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<td>4GLOBL-LOG</td>
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<td>3GLOBL-LOG</td>
<td>Global Logistics Supply Chain Management Associate of Applied Science</td>
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<td>4HITT-MDBC</td>
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<td>5HITT-MDC</td>
<td>Health Information Management-Medical Coding Level 2 Certificate</td>
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<td>3HITT-INF</td>
<td>Health Information Management Associate of Applied Science</td>
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<tr>
<td>3HITT-CAN</td>
<td>Health Information Management-Cancer Data Management Specialty Associate of Applied Science</td>
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<tr>
<td>AHITT-CAN</td>
<td>Health Information Management-Cancer Data Management Advanced Technical Certificate</td>
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<td>3HSC-LVN</td>
<td>Health Science Vocational Nursing Pathway Associate of Applied Science</td>
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<td>3HSC-MDAST</td>
<td>Health Science Medical Assisting Pathway Associate of Applied Science</td>
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<td>3HSC-PHAR</td>
<td>Health Science Pharmacy Technician Pathway Associate of Applied Science</td>
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<td>5INST</td>
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<td>Instrumentation Technology Enhanced Skills Certificate</td>
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<td>5INTD-DSGN</td>
<td>Interior Design Pre-Professional Level 2 Certificate</td>
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<td>3INTD-DSGN</td>
<td>Interior Design Associate of Applied Science</td>
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<td>ALTRM-CARE</td>
<td>Long-Term Care Administration Advanced Technical Certificate</td>
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<td>6MAR-CI</td>
<td>Maritime Career Interest Occupational Certificate</td>
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<td>3MARITIME</td>
<td>Maritime Transportation Associate of Applied Science</td>
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<td>6MASG-THPY</td>
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<td>4MED-ASST</td>
<td>Medical Assisting Certificate of Technology</td>
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<tr>
<td>3MED-INCRV</td>
<td>Medical Imaging-Invasive Cardiovascular Technology Associate of Applied Science</td>
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<tr>
<td>AMED-INCRV</td>
<td>Medical Imaging-Invasive Cardiovascular Technology Advanced Technical Certificate</td>
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<tr>
<td>3MED-RAD</td>
<td>Medical Imaging-Medical Radiography Associate of Applied Science</td>
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<tr>
<td>3MED-SONO</td>
<td>Medical Imaging-Diagnostic Medical Sonography Associate of Applied Science</td>
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<tr>
<td>AMRAD-MRI</td>
<td>Medical Imaging-Magnetic Resonance Imaging Advanced Technical Certificate</td>
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<tr>
<td>EMRAD-CT</td>
<td>Medical Imaging-Computed Tomography (CT) Enhanced Skills Certificate</td>
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<td>EMRAD-MAMM</td>
<td>Medical Imaging-Mammography Enhanced Skills Certificate</td>
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<td>3MED-LABT</td>
<td>Medical Laboratory Technology Associate of Applied Science</td>
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<td>AMLABT-MTA</td>
<td>Medical Laboratory Technology-Microscopic Tissue Anatomy Advanced Technical Certificate</td>
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<tr>
<td>6MH-SAC</td>
<td>Mental Health Services-Mental Health Substance Abuse Counseling Occupational Certificate</td>
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<td>5MH-SAC</td>
<td>Mental Health Services-Substance Abuse Counseling Level 2 Certificate</td>
</tr>
<tr>
<td>6MH-SAPS</td>
<td>Mental Health Services-Substance Abuse Prevention Specialist Occupational Certificate</td>
</tr>
</tbody>
</table>
### Technical Degrees and Certificates

Students may begin with an Associate of Applied Science (A.A.S.) or they may pursue a career pathway in increments, beginning with an occupational certificate and proceed through levels of certificates of technology. Some technical programs provide education beyond the A.A.S. degree.

All A.A.S. degree plans include one or more courses designed to meet each the Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) requirements. Students successfully complete the curricula requirements of a technical program have passed courses which demonstrate competency in the basic use of computers.

Completion of the semester credit hours for an occupational certificate does not qualify students to participate in the commencement ceremony. For information, see Graduation. (p. 338)

<table>
<thead>
<tr>
<th>Code</th>
<th>Program Description</th>
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<tbody>
<tr>
<td>6MH-TECH</td>
<td>Mental Health Services-Mental Health Technician Occupational Certificate</td>
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<tr>
<td>3MH-PSYC</td>
<td>Mental Health Services-Mental Health Clinical and Counseling Psychology Associate of Applied Science</td>
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<tr>
<td>6MUS-SOUND</td>
<td>Music-Sound Recording Occupational Certificate</td>
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<tr>
<td>4MUS-BRCST</td>
<td>Music-Audio Broadcast Certificate of Technology</td>
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<tr>
<td>4MUS-AUDI</td>
<td>Music-Techniques of Audio Engineering Certificate of Technology</td>
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<tr>
<td>3MUS-RCRD</td>
<td>Music Recording Associate of Applied Science</td>
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<td>6WLD-QAT</td>
<td>Nondestructive Testing Technology-Quality Improvement Associate Occupational Certificate</td>
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<td>4WLD-NDT</td>
<td>Nondestructive Testing Technology Certificate of Technology</td>
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<td>5WLD-NDT</td>
<td>Nondestructive Testing Technology Level 2 Certificate</td>
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<tr>
<td>EWLD-FXEOP</td>
<td>Nondestructive Testing-Fixed Equipment Specialist Enhanced Skills Certificate</td>
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<tr>
<td>EWLD-NDT</td>
<td>Nondestructive Testing-Quality Analyst Enhanced Skills Certificate</td>
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<tr>
<td>5NUR-LVN</td>
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<td>3NUR-ADN</td>
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<td>3NUR-LNTRN</td>
<td>LVN/Paramedic to RN Transition Nursing Associate of Applied Science</td>
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<tr>
<td>3NUR-PMTRN</td>
<td>LVN/Paramedic to RN Transition Nursing Associate of Applied Science</td>
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<td>3OCC-THRPY</td>
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<td>3PARA-LGL</td>
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<td>4PHAR</td>
<td>Pharmacy Technician Certificate of Technology</td>
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<tr>
<td>4PHED-PT</td>
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<td>3PH-THRPY</td>
<td>Physical Therapist Assistant Associate of Applied Science</td>
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<tr>
<td>6PIPEFIT</td>
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<tr>
<td>5PROT</td>
<td>Process Technology Level 2 Certificate</td>
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<td>3PROT</td>
<td>Process Technology Associate of Applied Science</td>
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<tr>
<td>EPROT-CT</td>
<td>Process Technology Chemical Technician Enhanced Skills Certificate</td>
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<tr>
<td>EPROT-PT</td>
<td>Process Technology Power Technician Enhanced Skills Certificate</td>
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<td>4SURT</td>
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<td>4WLD-ART</td>
<td>Welding-Art Welding Occupational Certificate</td>
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<td>6WLD-STI</td>
<td>Welding-Stick Pipe Occupational Certificate</td>
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<td>4WLD-C</td>
<td>Welding-Combination Welder Certificate of Technology</td>
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<td>4WLD-GAS</td>
<td>Welding-Gas Shielded Arc Certificate of Technology</td>
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<td>5WLD-IW</td>
<td>Welding-Industrial Welder Level 2 Certificate</td>
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<td>3WLD</td>
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</tbody>
</table>

### Continuing Education Programs

- Plumbing and Pipefitting Technology
- Truck Driving (Commercial)
- Combination Welding
- Sheet Metal Welder
Texas House Bill 1508

Texas House Bill 1508 requires colleges to inform students with a criminal background that a criminal record may preclude them from being licensed for certain professions. For students in this course who may have a criminal background, please be advised that your criminal history could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or program department chair.

### Programs with Licensure Requirements

<table>
<thead>
<tr>
<th>Programs with Licensure Requirements</th>
<th>Central</th>
<th>North</th>
<th>South</th>
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<tbody>
<tr>
<td>Air Conditioning Technology</td>
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<tr>
<td>Child Development/ Early Childhood Development</td>
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<td>X</td>
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<tr>
<td>Computed Tomography</td>
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<tr>
<td>Cosmetology</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Criminal Justice</td>
<td>X</td>
<td></td>
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<tr>
<td>Diagnostic Medical Sonography</td>
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<td></td>
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<td>Emergency Medical Technology (EMT)</td>
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<tr>
<td>Eye Care Technology</td>
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<td>Invasive Cardiovascular Technology (IVCT)</td>
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<td>Magnetic Resonance Imaging (MRI)</td>
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<td>Mammography</td>
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<tr>
<td>Real Estate</td>
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### Occupational Certificate

The occupational certificate is awarded to students who satisfactorily complete the required technical courses at least 15-23 semester credit hour program, including credit-by-exam or credit-by-certification.

### Certificate of Technology

The certificate of technology is awarded to students who complete the required sequence of technical courses of at least 24 and no more than 42 semester credit hours.

### Level 2 Certificate of Technology

A level two certificate consists of at least 30 and no more than 51 semester credit hours. Students in all level two certificates shall be subject to the requirements of the TSI.

### “The Basics” Core Curriculum/General Education Outcomes

Texas law mandates that all state-supported colleges and universities have a core curriculum consisting of 42 semester credit hours (SCH) that will automatically transfer to all Texas public colleges and universities. Students often refer to these courses as “the basics.” Embedded within the 42-hour core curriculum are general education student learning outcomes signifying what students learn by earning an Associate of Arts (A.A.), Associate of Science (A.S.), or Associate in Teaching (A.A.T.). The requirements of the Associate of Science in Engineering include some, but not all, of the 42-hour core curriculum. Embedded in technical programs, leading to an Associate of Applied Science (A.A.S.), are 15 hours of general education drawn from courses found in the core curriculum. General education student learning outcomes represent the core objectives outlined by the Texas Higher Education Coordinating Board. San Jacinto College general education outcomes include the following:

1. **Communication Skills** – Students will communicate ideas, express feelings, and support conclusions effectively in written, oral, and visual formats.
2. **Critical Thinking Skills** – Students will develop habits of mind, allowing them to appreciate the processes by which scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the human experience.
3. **Empirical and Quantitative Skills** – Students will develop quantitative and empirical skills to understand, analyze, and explain natural, physical, and social realms.
4. **Teamwork** – Students will consider different points of view and work interdependently to achieve a shared purpose or goal.
5. Personal Responsibility – Students will develop habits of intellectual exploration, personal responsibility, and physical well being.

6. Social Responsibility – Students will demonstrate a global perspective toward issues of culture, society, politics, environment, and sustainability.

Students must complete the 42-hour (SCH) core in the following areas: Communications (010); Mathematics (020); Life and Physical Science (030); Language, Philosophy, and Culture (040); Creative Arts (050); American History (060); Government/Political Science (070); Behavioral and Social Sciences (080); and Component Area Option (090).

<table>
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<td>PSYC 1300 Learning Framework</td>
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<td>BCIS 1305 Business Computer Applications</td>
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<td>ITSC 1309 Integrated Software Applications I</td>
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<td>Academic elective (if student passes the computer literacy exam)</td>
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<td>Communications</td>
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<td>MATH 1316 Plane Trigonometry</td>
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<td>MATH 1324 Mathematics for Business and Social Sciences</td>
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<td>MATH 1325 Calculus for Business and Social Sciences</td>
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<td>MATH 1332 Contemporary Mathematics (Quantitative Reasoning)</td>
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<td>MATH 1342 Elementary Statistical Methods (Statistics)</td>
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<td>MATH 2318 Linear Algebra</td>
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<td>MATH 2320 Differential Equations</td>
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<td>MATH 2412 Pre-Calculus Math</td>
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<td>MATH 2413 Calculus I</td>
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<td>MATH 2414 Calculus II</td>
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<td>Life and Physical Sciences (Natural Science)</td>
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<td></td>
<td>ASTR 1303 Stars and Galaxies (lecture)</td>
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<td>ASTR 1304 The Solar System (lecture)</td>
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<td>BIOL 1306 Biology for Science Majors I (Lecture)</td>
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<td>BIOL 1307 Biology for Science Majors II (Lecture)</td>
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<td>BIOL 1308 Biology for Non-Science Majors I (Lecture)</td>
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<td>BIOL 1309 Biology for Non-Science Majors II (Lecture)</td>
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<td></td>
<td>BIOL 1311 General Botany</td>
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<td></td>
<td>BIOL 1313 General Zoology (Lecture)</td>
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<td></td>
<td>BIOL 2301 Human Anatomy and Physiology I (Lecture)</td>
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<td>BIOL 2302 Human Anatomy and Physiology II (Lecture)</td>
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<td></td>
<td>CHEM 1305 Introductory Chemistry I (lecture)</td>
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<td>CHEM 1311 General Chemistry I (lecture)</td>
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<td>CHEM 1312 General Chemistry II (lecture)</td>
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<td>GEOL 1301 Earth Sciences for Non-Science Majors I (lecture)</td>
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<td>GEOL 1303 Physical Geology (lecture)</td>
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<td>GEOL 1304 Historical Geology (lecture)</td>
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<td>GEOL 1305 Environmental Science (lecture)</td>
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<td>PHYS 1301 College Physics I (lecture)</td>
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<td>PHYS 1302 College Physics II (lecture)</td>
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<td>PHYS 2325 University Physics I (lecture)</td>
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<td>PHYS 2326 University Physics II (lecture)</td>
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<td></td>
<td>Language, Philosophy, and Culture (Humanities)</td>
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<td>Select one of the following:</td>
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<tr>
<td></td>
<td>ENGL 2322 British Literature I</td>
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<td></td>
<td>ENGL 2323 British Literature II</td>
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<tr>
<td></td>
<td>ENGL 2327 American Literature I</td>
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<td></td>
<td>ENGL 2328 American Literature II</td>
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<tr>
<td></td>
<td>ENGL 2332 World Literature I</td>
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<td></td>
<td>ENGL 2333 World Literature II</td>
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<td></td>
<td>ENGL 2341 Literature and Film</td>
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<td></td>
<td>ENGL 2351 Mexican American Literature</td>
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<td></td>
<td>GEOG 1302 Human Geography</td>
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<tr>
<td></td>
<td>HIST 2321 World Civilization I</td>
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<td></td>
<td>HIST 2322 World Civilization II</td>
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<tr>
<td></td>
<td>HUMA 1301 Introduction to the Humanities I</td>
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<td>PHI 1301 Introduction to Philosophy</td>
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<td>PHI 2306 Introduction to Ethics</td>
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<td>Creative Arts (Fine Arts)</td>
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<td>Select one of the following:</td>
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<td>ARTS 1301 Art Appreciation</td>
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<td>ARTS 1303 Art History I (Prehistoric to the 14th century)</td>
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<td>ARTS 1304 Art History II (14th century to the present)</td>
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<td>DANC 2303 Dance Appreciation</td>
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<td>DRAM 1310 Introduction to Theatre</td>
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<td>DRAM 2366 Introduction to Cinema: Film Appreciation I</td>
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<td>MUSI 1306 Music Appreciation</td>
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<td>MUSI 1307 Music Literature</td>
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<td>MUSI 1310 American Music</td>
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<td>American History</td>
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<td>Select two of the following:</td>
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<tr>
<td></td>
<td>HIST 1301 United States History I</td>
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<td></td>
<td>HIST 1302 United States History II</td>
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<td>HIST 2301 Texas History</td>
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<td>HIST 2327 Mexican American History I</td>
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<td>HIST 2328 Mexican American History II</td>
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<td></td>
<td>Government/Political Science</td>
<td>6</td>
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<td></td>
<td>Select two of the following:</td>
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<td>GOVT 2305 Federal Government (Federal Constitution and Topics)</td>
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<tr>
<td></td>
<td>GOVT 2306 Texas Government (Texas Constitution and Topics)</td>
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<td></td>
<td>Social and Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
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</tbody>
</table>
ANTH 2302  Introduction to Archaeology
ANTH 2346  General Anthropology
ANTH 2351  Cultural Anthropology
ECON 2301  Principles of Macroeconomics
ECON 2302  Principles of Microeconomics
GEOG 1303  World Regional Geography
GOVT 2304  Introduction to Political Science
HIST 2311  Western Civilization I
HIST 2312  Western Civilization II
PSYC 2301  General Psychology
SOCI 1301  Introduction to Sociology
SOCI 2319  Minority Studies I

Component Area Option
Select two of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communications</td>
</tr>
<tr>
<td>SPCH 1321</td>
<td>Business and Professional Speech</td>
</tr>
<tr>
<td>PHED 1164</td>
<td>Introduction to Physical Fitness and Wellness</td>
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<tr>
<td>CHIN 1411</td>
<td>Beginning Chinese I</td>
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<tr>
<td>CHIN 1412</td>
<td>Beginning Chinese II</td>
</tr>
<tr>
<td>FREN 1411</td>
<td>Beginning French I</td>
</tr>
<tr>
<td>FREN 1412</td>
<td>Beginning French II</td>
</tr>
<tr>
<td>GERM 1411</td>
<td>Beginning German I</td>
</tr>
<tr>
<td>GERM 1412</td>
<td>Beginning German II</td>
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<tr>
<td>SGNL 1401</td>
<td>Beginning American Sign Language I</td>
</tr>
<tr>
<td>SGNL 1402</td>
<td>Beginning American Sign Language II</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish I</td>
</tr>
<tr>
<td>SPAN 1412</td>
<td>Beginning Spanish II</td>
</tr>
</tbody>
</table>

Total Credits 48

1  MATH 1324 Mathematics for Business and Social Sciences, MATH 1325 Calculus for Business and Social Sciences, and MATH 1332 Contemporary Mathematics (Quantitative Reasoning) are not recommended for students pursuing mathematics or science.

2  Students must be simultaneously co-enrolled in the co-requisite science lab.

3  MATH 1342 is required for a bachelor's degree in nursing.

4  BIOL 1308 Biology for Non-Science Majors I (Lecture), BIOL 1309 Biology for Non-Science Majors II (Lecture) and CHEM 1305 Introductory Chemistry I (lecture), and GEOL 1301 Earth Sciences for Non-Science Majors I (lecture) do not meet the requirements for science majors.

5  BIOL 2301 Human Anatomy and Physiology I (Lecture) and BIOL 2302 Human Anatomy and Physiology II (Lecture) are designed for allied health majors and not for academic transfer as science majors.

6  Students who have taken GOVT 2301 or GOVT 2302, but not both, should check with an educational planner on how to complete the 6 SCH.

7  2 SCH in this option include the labs for science courses. Other courses that may be used in this component may include any core curriculum course that has not been used to fulfill a previous component.

If a student successfully completes San Jacinto College's 42-hour core curriculum, that block of courses must be substituted for the receiving institution's core curriculum. A student may not be required to take additional core curriculum courses to meet the requirements of the core. Students who transfer without completing the core curriculum shall receive academic credit in the core curriculum of the receiving institution for each of the courses that the student has successfully completed in the San Jacinto College core curriculum.

Students should plan core curriculum courses that would meet baccalaureate degree requirements at the four-year institution.

Transfer Path

12 SCH

San Jacinto College offers academic transfer courses — that is, courses found in the Academic Course Guide Manual (ACGM) — for those students who wish to pursue a baccalaureate degree at a four-year or upper-level college or university. Before enrolling in academic transfer courses, students should discuss their career goals with an educational planner/counselor and explore the requirements for meeting those goals. Students should research the next level of their education and determine if lower-division academic transfer courses will meet the requirements of the baccalaureate institution. If a student accumulates additional hours beyond the core curriculum, those hours may apply to the transfer path and become part of the associate degree.
GRADUATION REQUIREMENTS

Graduation Requirements for All Academic and Technical Awards (Degrees/Certificates)

Awards include the Associate of Arts (A.A.), Associate of Arts in Teaching Degree (A.A.T.) and Associate of Science Degree (A.S.).

The Associate of Applied Science degree (A.A.S.), Certificate of Technology (Level II), Certificate of Technology (Level I), Occupational Certificate (Level I), Enhanced Skills Certificate (Level III)\(^1\) and Advanced Technical Certificate (Level IV)\(^1\).

San Jacinto College confers the awards above upon students who meet the general requirements for graduation as listed below.

- Meet high school graduation requirement for unconditional admission (must be a high school graduate or the equivalent)
- Meet the completion of 25 percent of the award requirements in residence at San Jacinto College. Residence hours include the college-level courses taken at San Jacinto College that are required and applied to the award. It also includes internal credit-by-exam and credit-by-certification courses taken at San Jacinto College and applied to the award. Courses in the following areas that may appear on the award check are not included in the calculation of the 25 percent residence hours including Electives, Attempted: Withdrawn, Not Passed, or Retaken, or Attempted, Not Counted.
- Meet the minimum final award grade point average (GPA) of 2.0 (C average) which includes all courses used in the award as identified above. Courses in the following areas that may appear on the award check are not included in the calculation of the award GPA requirement including Electives, Attempted: Withdrawn, Not Passed, or Retaken, or Attempted, Not Counted.
  - The award GPA is displayed only on the My San Jac GPS award evaluation (graduation catalogs Fall 2013 and forward) or CAPP award evaluation (graduation catalogs prior to Fall 2013).
  - To be awarded the Level II Certificates, Enhanced Skill Certificates, Advanced Technical Certificates, and all Associate Degrees, the student must have met the TSI standard of being college-ready in all areas.
- Meet the provisions as described in the section titled Transfer of Credit when transfer credit is to be applied toward an award. (Note: transfer credit is not considered as residence hours)
- Meet with a counselor or educational planner to verify award completion.
- Make formal application for graduation at the Educational Planning, Counseling & Completion office. (See Academic Calendar for deadline dates.)

\(^1\) Requires additional requirements. See Catalog area.

Additional Associate Degrees (Second Degrees)

Students who have completed a degree at San Jacinto College should obtain academic advising before enrolling in another associate’s degree. With the following stipulations, students may obtain additional associate’s degrees.

- A student who has received an A.S. may obtain an A.A. or A.A.T, but not two A.S. degrees, by completing a minimum of 12 applicable hours that did not apply to the previous degree.
- A student who has received an A.A.T. may obtain an A.S. but not another A.A.T. or A.A. degree, by completing a minimum of 12 applicable hours that did not apply to the previous degree.
- A student who has received an A.A.S. may obtain an A.A. or A.A.T., or A.S. by completing all degree requirements.
- A student who has received an A.A.S may obtain an additional A.A.S. in a different six-digit CIP (Classification of Instructional Programs), by completing all degree requirements.
- Students who have received an A.A., A.S., or A.A.T degree may obtain an A.A.S. degree by completing the required technical courses in the program.

Awarding of Degrees and Certificates

Upon completion of degree and/or certificate requirements, the student must apply for graduation for the credential(s) to be awarded. There is no fee to apply for graduation. Participation in commencement is not a requirement for graduation. Students apply to participate in commencement separately.

1. Degree Evaluation: The student first completes a Degree Evaluation online using SOS and selecting MySanJacGPS or CAPP. Confirm that all requirements for the degree or certificate are completed or in progress. Print a copy and bring it to the Educational Planning, Counseling & Completion office by the application deadline date and submit Request for Final Graduation Verification.
2. Transcripts: Following the end-of-term posting of grades, the College verifies that all requirements in progress have been completed and posts the degrees to the student’s records. Transcripts may be requested by the student approximately two weeks after the posting of final grades for the term.
3. Diplomas: Diplomas are normally available for pick-up in the Educational Planning, Counseling & Completion office about three weeks following the posting of final grades for the term.
4. Reverse articulation: Students who have not completed all course requirements, but have completed the residency requirements for a degree from San Jacinto College (i.e., 16 semester credit hours), may fulfill their course requirements at another regionally accredited or committee approved institution with which San Jacinto College has an agreement and transfer the credits to San Jacinto College. The applicable catalog for graduation will be in accordance with the provisions listed above.

Review for Academic Associate Degree Completion for Students Completing the State-mandated Core Curriculum

Each academic year the Texas Higher Education Coordinating Board requires San Jacinto College to report the students who have completed the state-mandated Core Curriculum which is approximately two-thirds of the hours required for an associate degree. When these students are reported as completing the Core Curriculum, they will then be reviewed by San Jacinto College to determine if they have also completed all the requirements for an associate degree. If all degree requirements are met, the students will be awarded an Associate of Arts degree in General Studies and the degree posted to the official transcript. The students will be notified via the last known email address that the degree
has been awarded. The students are eligible to attend the next planned commencement ceremony, and they will receive a graduation diploma.

**Awarding San Jacinto College Associate Degrees via Reverse Transfer/Articulation**

San Jacinto College participates in the reverse transfer/articulation process with several universities in Texas. This process allows the university to identify transfer students who have completed a minimum of 16 college-level hours in residence at San Jacinto College and send official transcripts showing the course work completed at the university. San Jacinto College evaluates the transfer work and runs a degree compliance to review the student's record to determine whether the student has met the requirements to be awarded an associate degree. If so, the Associate of Arts in General Studies degree will be awarded and posted to the official transcript. The students will be notified via the last known email address that the degree has been awarded.

**Awarding Academic and Technical Degrees/Certificates to Students not Applying for Graduation**

Each student is expected to run a degree check via MY SANJAC GPS to determine if he or she has met degree or certificate requirements for a particular program; then the student should apply for graduation at the appropriate College office.

College staff may evaluate the records of students who did not apply but appear to have completed all certificate or degree requirements in previous terms. Their records may be evaluated by College staff. The College staff will review the records to determine if a student is eligible to be awarded a certificate or degree. If a student has met the requirements, the certificate or degree will be awarded and posted to the official transcript. The student will then be notified that the degree has been awarded via the last known email address.

This does not release students from the individual responsibility of officially applying for graduation in order to attend the commencement ceremony. This process is designed for students who did not apply. It does not guarantee that all degrees and certificates will be identified and awarded.

**Commencement**

Students may express their desire to participate in commencement when they submit the Request for Final Graduation Verification form, but commencement is not a requirement for graduation.

Students who complete a certificate of technology, a level 2 certificate or an associate degree may participate in commencement.

Cap and gown for commencement are ordered through the campus bookstore. Honors program graduates, members of Phi Theta Kappa and members of National Technical Honor Society should speak to the program director or club advisor regarding specialty regalia for graduation. Veterans should speak with the Veterans Coordinator on their campus concerning Honor Cards for veterans.

**Graduation**

**Catalog Selection for Graduation**

A student becomes eligible to graduate by completing the degree and/or certificate requirements as set forth in the San Jacinto Community College District Catalog. These graduation requirements change periodically to meet the various needs of transfer universities, business and industry (employers), and/or cancellation of courses and programs. The guidelines listed below have been established to assist students in identifying the specific requirements which apply to their chosen programs of study and to identify the available catalog selection options for graduation.

Students are eligible to graduate under the program requirements of any catalog academic year in which they were enrolled in at least one term or the most current catalog at the time they apply for graduation even if they were not enrolled. Enrollment in an academic year is defined as registration, payment, and the posting of a grade on the official SJCD transcript within the academic year. San Jacinto College must still be authorized by the Texas Higher Education Coordinating Board to award the degree or certificate.

For nursing and other specialized programs, the term of acceptance into the program determines the catalog year. When the elapsed time from initial enrollment to program completion is extended, individual courses may have been replaced or canceled.

Students must consult the new catalog each year to confirm whether their chosen programs have been revised or will be replaced, or if a new program has been introduced, which may be more appropriate for meeting their education objectives. Educational planners, counselors, or admissions advisors will assist students in the selection of the appropriate catalog and courses.

**Campus Selection for Graduation**

Students may choose to graduate from the campus of their choice provided they meet the following requirements:

1. The student has completed course work at the campus chosen.
2. The campus offers the program in which the degree or certificate is sought.

Students who have not completed all course requirements, but have completed the residency requirements for a degree from San Jacinto College, may fulfill their course requirements at another regionally accredited or committee approved institution and transfer the credits to San Jacinto College. The applicable catalog for graduation will be in accordance with the provisions listed above.

Students whose technical program has been discontinued by the College will be provided an opportunity to graduate under a catalog in accordance with the above provisions provided their graduation dates are within the time period in which the College is authorized by the State of Texas to award the degree. Students whose technical programs are discontinued on one campus, but are continued on another campus, are expected to complete their programs on the other campus or they may attempt to earn other degrees.

**Transfer Information**

Students should consider all options and should define the requirements for each option. Those considerations should include determining whether or not the college or university offers the program of study they plan to pursue, if they are eligible for the program, and if they are able to meet the enrollment and financial requirements.

Students should discuss TSI-required test scores with an educational planner/counselor and understand what the test scores mean and how they may affect the selection of courses. While college preparatory courses are important for student success, these courses do not
transfer for college credit applied to a degree. The Course Descriptions section of the Catalog notes that many courses have reading, writing, or mathematics skill requirements, which are determined by the placement tests students take upon entry.

Admissions advisors, educational planners and/or counselors are available to help students determine which and how many courses they should take. The normal load in a Spring or Fall term is 15 or 16 credit hours; however, students who work more than 10 hours a week, have family obligations, or commute long distances should take fewer hours.

After talking with an educational planner or counselor, students should consider other steps involved in selecting and completing degree requirements. They should consider taking review courses or college preparatory courses if their backgrounds are weak in certain subjects or if a long period of time has passed since they studied a particular subject. Students should take courses in the proper sequence. Some courses have course prerequisites, meaning that certain courses must be completed prior to enrolling in more advanced courses.

Students who have completed college credit at another accredited college or university prior to enrolling at San Jacinto College must submit official transcripts to the Admissions office. Students pursuing a degree at San Jacinto College must request that those transcripts be evaluated in order to determine which courses will transfer and apply to the majors which they have selected at San Jacinto College.
PAYING FOR COLLEGE

Pay as You Go!

Beginning the evening of payment deadline for each term, San Jacinto College initiates the Pay-As-You-Go system. All students who have a balance due or have not made a payment will be dropped as outlined below. This applies to both totally unpaid and partially unpaid registrations. The drop process will include all registrations.

This payment system is run daily during the entire term, beginning on the evening of payment deadline. Students registering for the first time or re-registering on or after payment deadline will be required to pay in full the same day they register. The balance due must be zero.

Example: Students who register on Monday must be paid in full by 11:59 p.m., on the same Monday. The evening of payment deadline, the registration system (SOS) will be offline every night from 12 to 3 a.m., to remove registrations that are totally or partially unpaid.

If a student’s balance does not equal zero, or less, the following actions are taken:

Totally Unpaid:

A student who registered for courses and has not made any payment, nor has any financial aid, third party billing or scholarship been applied to the account. Registrations for all courses will be removed and the student will receive an email notification of this action.

Partially Unpaid:

1. A student registered for some courses and paid for them but then added additional courses and did not pay for the added courses.
2. A student dropped a course, then added a course and did not pay the difference.
3. A student’s financial aid, third party billing or scholarship applied to the account did not cover the entire cost.

If a student’s balance does not equal zero, the registration will be adjusted to bring the account balance to zero. Courses with the latest start date will be dropped first. Then courses will be dropped according to registration date and time. These courses will be dropped the following business day. Students will receive an email notification of this action.

Students must be sure their financial aid, third party billing or scholarship is applied to their account.

Methods of Payment

San Jacinto College accepts the following methods of payment:

Web Payments

1. Credit Cards – American Express, Discover, MasterCard or Visa.
2. Debit Cards – Must have a MasterCard or Visa affiliation.
3. WEBCheck – Must be an individual checking or savings account.
   a. Company checks or loan checks from credit cards or other financial institutions should not be used online. They will be rejected and result in a $30 returned check fee.
   b. The College assesses a $30 processing fee for each stopped-payment or returned check. An individual who has had a check returned must then pay the College by cash, cashier’s check, money order or credit card.

4. Installment Payment Plans that are set up online will capture the scheduled method of payment and use that for future dated payments. The students may use the Student Account Suite to update a scheduled method of payment for the automated payment process.

In-person Payments at Any Campus Business Office

1. Credit Cards – American Express, Discover, MasterCard or Visa
2. Debit Cards – Must have a MasterCard or Visa affiliation
3. Debit Cards – PIN Based

4. Checks
   a. Personal checks in which the student is an authorized signer on the account or if the authorized signer on the account is present may be converted to an electronic payment from the account. These are referred to as POP checks. The cashier will inquire as to whether a student agrees to have the check converted to an electronic payment. If the student agrees, the check will be returned to the student upon completion of the cashiering transaction along with an electronic agreement receipt.
   b. Personal checks in which the student is not an authorized signer on the account and the authorized signer is not present will be processed as a normal paper check and included with the normal deposits of the College.
   c. Company checks, cashier checks, money orders or loan checks from credit cards or other financial institutions will be processed as a normal paper check and included with the normal deposits of the College.
   d. The College assesses a $30 processing fee for each stopped-payment or returned check. An individual who has had a check returned must then pay the College by cash, cashier’s check, money order or credit card.


6. Third Party Payment – Payments made by third party vendors via letters, purchase orders or invoices must be presented in person to any campus business office each semester in order for the student account to be updated. Students are liable for any unpaid balances.

7. Exemptions/Scholarships – Documentation must be submitted in person to any campus business office each semester in order for the student account to be updated. Students are liable for any unpaid balances.

San Jacinto College will not be responsible for multiple holds being placed on a credit or debit card by the bank or the card issuer.

Students paying by cash or check who want to pay in person at any Campus Business Office, must pay during the regular business hours on the business day they register.

Installment Payment Plan (IPP)

An installment payment plan (IPP) is available at any campus business office and on the SOS online registration system. Students have the opportunity to pay tuition and fees in four payments. The terms include the following: Pay 25 percent of eligible tuition and fees when setting up the payment plan and pay three additional 25 percent payments on specified dates for each term. There is a $25 fee for this service that is prorated over the payment period. Late payments are charged $25 each. Students may use the SOS system to set up automatic payments using a credit card, checking or savings account.

Students who utilize the IPP will still need to follow the regulations for withdrawals and refunds. Students who withdraw from or add one or
more classes still must pay the installments on time. The system will recalculate any changes to the future dated installments and prevent loss of registration. No installment payment plan is available for books, supplies or cash advances. The financial aid section describes other forms of financial assistance. Installment plans must be paid in full before another installment plan can be initiated.

**Credit Card Account Verification – Authorization**

An individual who uses a credit card to pay tuition or fees authorizes the College to communicate with the credit card issuer and/or financial institution for the limited purpose of verifying information related to use of the credit card at the College such as verification of account number, of a transaction or of a student's signature.

San Jacinto College will not be responsible for multiple holds being placed on a credit or debit card by a bank or the card issuer.

**Delinquent Accounts**

Currently enrolled students who are delinquent in repaying a loan, are responsible for a returned check or have failed to pay appropriately and on time any other debts to San Jacinto College (not including library and traffic fines) will receive warning notices informing them that they must pay their debts by a certain date or be withdrawn from all classes. If they do not pay by the designated date, the College may withdraw them from all classes, and they may not be reinstated during that term.

Students must pay all debts—including but not limited to: tuition, fees, fines, returned check penalties, lost equipment, rescedned financial aid, College generated loans and restitution for loss of or damage to College property before they may re-enroll, receive a diploma or have a request for an official transcript honored.

Delinquent accounts sent to a collection agency may be reported to the credit bureau.

In the event of failure to pay the Installment Payment Plan (IPP) or Financial Aid Short Term Loan (FASTL) at its maturity, and if the same is placed in the hands of an attorney or collection agency, the student shall be responsible for all expenses and expenditures, cost of attorney and/or collection services incurred, protecting the College's interest, rights and remedies on the Installment Payment Plans or Financial Aid Short Term Loan or returned checks.

The College charges a late fee of $25 for late payment of any IPPs or FASTLs. The College assesses a $30 processing fee for each stopped-payment or returned check. Returned checks include electronically converted checks that have been rejected by the College bank. An individual who has had a check returned must then pay the College by cash, cashier's check, money order or credit card.

A student who is in default on a government student loan for attendance at San Jacinto College may not receive an official academic transcript or diploma unless the student has made six consecutive voluntary monthly payments on the defaulted loan.

**Refund Policy**

To be eligible for a refund, students must officially drop individual courses or completely withdraw from the College by the deadline in the Refund Schedule. Students may find the specific dates for the Refund Schedule online for each term. Specific provisions of the Texas Administrative Code, Title 19, Part I, Chapter 21, Subchapter A, Rule § 21.5 “Refund of Tuition and Fees at Public Community/Junior and Technical Colleges,” govern the refund schedule. Only the Texas Legislature or the Texas Higher Education Coordinating Board as authorized by the Legislature can alter this schedule.

The College will process refunds only after completion of all other registration responsibilities.

The College will grant refunds for re-determined legal residence only if the student presents proof to the Admissions Office on or before the 12th class day of the fall or spring term or the eighth class day of the summer session.

Refunds do not include the international student fee.

**Credit Refunds or Financial Aid Disbursements–Payments to Students**

BankMobile, the technology and financial services company focused on the higher education market, has been selected to electronically distribute semester credit hour refunds and financial aid disbursements to San Jacinto College students. They do not process dual credit, Continuing and Professional Development or undocumented students and Parent Plus Loans.

San Jacinto College uses BankMobile to provide a more efficient, safer and convenient refund disbursing process. This method allows students to have quicker access to funds and provide more options for disbursements of Federal financial aid and college credit refunds due to changes in enrollment.

All San Jacinto College students (except the group identified above) enrolled and marked paid as of the Payment Deadline will receive a Refund Selection Kit with a unique Personal Code in the mail with instructions on how to log on to a secure website. The student will be responsible to sign in to the website and choose a refund preference. If they choose the BankMobile Vibe Account, they will be provided a virtual card, and their actual card will automatically be ordered and mailed to them. Students can reorder an active card with BankMobile. There is a $10 replacement card fee payable through BankMobile for lost cards that have previously been activated by the student.

Students will be asked to confirm their primary email and mailing addresses and select how they would like to receive their refund from BankMobile. Students will be given multiple options including an Automated Clearing House (ACH) transfer to a bank account of their choice; direct deposit to the BankMobile Vibe Account, an optional, no-minimum balance, no-monthly-fee, FDIC-Insured checking account provided by BankMobile, etc. The card also acts as a Debit MasterCard® with acceptance worldwide. Students also have the capability to sign up to receive text and/or email notifications and have access to pay bills online through a secure website.

In addition to the refund disbursement process, BankMobile educates the campus community on the changes and benefits to the process. BankMobile also collects and maintains student bank account information in a safe and protected manner. Students and parents are assured that BankMobile handles all customer service inquires from students or administration staff in an efficient, confidential and secure manner.
Course Withdrawal / Dropping Courses

Students who officially drop an individual course or withdraw from all courses will receive a percentage of the refundable tuition and fees they paid, depending on the effective date of the withdrawal, in accordance with the state refund schedule. Please see the Refund Table below.

Specific withdrawal dates and refund dates apply to each course based upon start date and class length. The College website contains a table with details for the different course lengths and appropriate refund periods and percentages. Refund percentages are 100 percent prior to the first day of class and 70 percent, 25 percent or 0 percent based on specific dates. The College does not allow 100 percent refunds during course drops/adds after the first day of class.

Once students pay tuition and fees or have financial aid applied, they are considered officially registered until they complete the term or drop individual or withdraw from all courses. Simply not attending class or telling the instructor does not constitute course drops. Course drops/withdrawals become official and effective the date they are completed online or in person regardless of the date the student last attended class and even if the student never attended class. A student unable to appear in person must contact the Admissions Office or the Educational Planning, Counseling & Completion Office.

Canceling a check will not cancel registration nor constitute a drop/withdrawal. Drops/withdrawals may reduce the amount of an individual payment plan (IPP) but the student is responsible for any remaining balance. The College may apply the appropriate refund for College initiated actions such as, but not limited to, canceled classes, schedule adjustments to be in compliance with College policy or underpayment of tuition and fees subject to the pay-as-you-go process.

Refund Table (Semester Credit Hour Charges Retained by the College)

<table>
<thead>
<tr>
<th>Tuition Type</th>
<th>100% Refund-</th>
<th>70% Refund-</th>
<th>25% Refund-</th>
<th>0% Refund-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Charges</td>
<td>The College</td>
<td>The College</td>
<td>The College</td>
</tr>
<tr>
<td></td>
<td>credited</td>
<td>retains 30%</td>
<td>retains 75%</td>
<td>retains 100%</td>
</tr>
<tr>
<td></td>
<td>back to the</td>
<td>of the</td>
<td>of the</td>
<td>of the</td>
</tr>
<tr>
<td></td>
<td>student’s</td>
<td>original</td>
<td>original</td>
<td>original</td>
</tr>
<tr>
<td></td>
<td>account</td>
<td>charges</td>
<td>charges</td>
<td>charges</td>
</tr>
<tr>
<td>Texas</td>
<td>$0</td>
<td>$15.60 per</td>
<td>$39 per</td>
<td>$52 per</td>
</tr>
<tr>
<td>Resident (In-District)</td>
<td></td>
<td>semester</td>
<td>semester</td>
<td>semester</td>
</tr>
<tr>
<td>Tuition</td>
<td></td>
<td>credit hour</td>
<td>credit hour</td>
<td>credit hour</td>
</tr>
<tr>
<td>Texas</td>
<td>$0</td>
<td>$29.10 per</td>
<td>$72.75 per</td>
<td>$92 per</td>
</tr>
<tr>
<td>Resident (Out-of-District)</td>
<td></td>
<td>semester</td>
<td>semester</td>
<td>semester</td>
</tr>
<tr>
<td>Tuition</td>
<td></td>
<td>credit hour</td>
<td>credit hour</td>
<td>credit hour</td>
</tr>
<tr>
<td>Non-Texas</td>
<td>$0</td>
<td>$48.60 per</td>
<td>$121.50 per</td>
<td>$162 per</td>
</tr>
<tr>
<td>Resident (In-District)</td>
<td></td>
<td>semester</td>
<td>semester</td>
<td>semester</td>
</tr>
<tr>
<td>Tuition</td>
<td></td>
<td>credit hour</td>
<td>credit hour</td>
<td>credit hour</td>
</tr>
</tbody>
</table>

The College retains either 0%, 30%, 75% or 100% of the original charge related to any refundable course fees or the general service fee depending on the specific date of withdrawal.

Financial Aid

Financial Aid Office

The primary purpose of the Financial Aid Office is to provide financial assistance in the form of grants, scholarships, loans and employment opportunities to qualified students who, without such assistance, would be unable to attend college.

Students should contact the Financial Aid Office on their campus for assistance in completing financial aid or scholarship applications and for answers to specific questions about the financial aid process.

Eligibility

In general, to be eligible for financial aid, students must:

1. Be a U.S. citizen or an eligible non-citizen.
2. Have a high school diploma, GED or its recognized equivalent.
3. Be enrolled in a certificate or degree program.
4. Be making satisfactory academic progress.
5. Not be in default of a federal or state student loan or owing a repayment on any federal grant.
6. Meet requirements specific to the financial aid program for which students are applying.
7. Enroll for at least the minimum number of hours required by each program.

Eligibility Date (Census Date)

If students register for a term and decide that they do not want to attend, they must withdraw themselves from their courses before classes begin. If they do not withdraw themselves, they may receive grades of F and/or FX in registered courses which will impact their grade point average and incur a potential debt for financial aid received. If a student wants to avoid a withdrawal assigned on their transcript the student must withdraw prior to the census date. The official census date varies according to the length of the course. For a traditional semester, generally the 12th class day is marked as the census date. For all other parts of term census dates please visit our office.

Awards are based on enrollment status for each term. If students enroll for less than 12 semester hours or if they drop classes, their funding will be adjusted. Also, if they do not attend class(es) or if they stop attending class(es), their aid may be adjusted or canceled. If students are enrolled in part-of-term classes, eligibility will be calculated and payment made after the parts-of-term classes begin. Part-of-term classes are defined as classes with varying start and end dates that can occur during the regular term or between terms.

Concurrent Enrollment

Federal regulations prohibit a student from receiving financial aid funds under Title IV programs while enrolled at more than one college or institution at the same time. A San Jacinto College student who registers concurrently at another school and receives Title IV aid at both schools must officially withdraw from one of the schools so financial aid can be processed at the appropriate school. If the student does not officially withdraw, all San Jacinto College financial aid will be rescinded and the student will be accountable for reimbursement of these funds to the College.
Financial Aid Steps
Completing the following steps by the deadline will increase the chance of the financial aid application being reviewed prior to the beginning of school.

1. Apply for admission to San Jacinto College online at www.sanjac.edu. Returning students who have not attended San Jacinto College during the past year may need to submit a new application. Please keep in mind that students must be admitted to San Jacinto College prior to any financial aid awards being made.

2. Submit an official high school transcript or state approved equivalency to the San Jacinto College Admissions Office.

3. Transfer students must submit official college transcripts from each institution attended that includes all classes attempted and file a request with the Admissions Office to have the transcripts evaluated. Students who have taken classes outside the United States must have their transcripts evaluated on a course by course basis by a foreign transcript evaluation company, at their own expense.

4. Register with Selective Service at www.sss.gov (http://www.sss.gov) if a student is a male age 18 to 25.

5. Apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.gov (http://www.fafsa.gov). Our school code is: 003609

6. Follow up on all communication from the College when additional information is requested.

7. Register for classes.

Procedures
Students should apply for federal funding and follow the progress of their financial aid application on the web.

1. Students can follow the progress of their financial aid application by viewing the SOS website, under the My SanJac link at www.sanjac.edu, for the following actions:
   - Check the status of a financial aid file, including documents that are requested.
   - View financial aid awards.
   - Determine if funds have arrived at the school.
   - Determine if funds were transferred to your SanJac Card.
   - Determine remaining eligibility for future terms.
   - Check any updates to financial aid account.
   - View grades and academic transcript.

2. If students have been awarded financial aid they can expect the aid to be posted as authorized (available) aid to their account at the time of registration. Only once the student is registered can eligibility of financial aid be determined. The updating of the authorized process occurs on a regular and frequent basis. If the aid has not been authorized within 24 hours of registration, students should contact the financial aid office to determine if a problem exists. Financial aid funds are officially disbursed to student accounts approximately 30 days after the start of the semester. If a student is enrolled in a later part-of-term class, funds will be applied after the class begins. If student fees are paid by a third party, students must visit the campus business office to sign the paperwork to have the third party payment applied. Once payment has been applied, the paid flag is set on the account. The paid flag prevents the purging of registration for non-payment.

3. Once aid has been authorized, students will also be able to go to the campus bookstore to charge books and supplies to their grants, loans and some scholarships within 24 to 48 hours. Students will need their student ID number, a photo ID and a copy of their class schedule to use any available funds. Students should check with the bookstores or the financial aid office for the dates they may charge. Students have the right to opt-out of using the bookstore on campus. If the opt-out is selected, students will still receive their credit balance during the regular refund process.

4. Any unused balances from financial aid funds (grants and/or loans) will be transferred to the student’s preference of refund method i.e. existing personal bank account or SanJac Card. After attendance has been verified, financial aid credit balance refunds are issued 30 days after the first day of classes. Students may track the status of their refund by logging into SOS and viewing the Account Summary by Term section under My Financial Aid.

5. If a student does not plan to attend and financial aid is authorized, the student must officially withdraw.

6. If students have been awarded financial aid for fall and/or spring terms and they decide not to register for a term, their financial aid awards will be canceled for the terms in which they don’t attend.

FAFSA School Code (003609)
The Free Application for Federal Student Aid (FAFSA) determines eligibility for aid. The FAFSA is available online. The San Jacinto College school code is 003609 regardless of the campus you will attend. Go to: www.fafsa.gov (http://www.fafsa.gov) for details.

Deadlines
Students must apply for financial aid each year. If students wish to receive priority consideration, they should apply as soon as the FAFSA is available, usually after Oct. 1. Although students are awarded on a first come, first served basis, funds for most financial aid programs are awarded on demonstrated financial need.

Awarding of aid will begin approximately the first week of June. To secure an award for fall, applications must be completed by the end of June; to secure an award for spring, applications must be completed by the end of October; to secure an award for summer, applications must completed by the end of April. An application is considered complete when all documents needed by the Financial Aid Office and the Admissions Office are on file.

Student applications completed after the deadlines above may still receive aid. However, they will have to pay for their own tuition, fees, books and supplies at the time of registration.

Before Beginning a Free Application for Federal Student Aid (FAFSA)
Students (and parents) will log on to FAFSA on the Web at www.fafsa.gov (http://www.fafsa.gov) with a username and password that they create, this is also known as an FSA ID.

Steps to create a FSA ID:
- Go to fsaid.ed.gov (http://fsaid.ed.gov)
- Create a username and password
- Enter all information that applies

Email Address
Students should be sure to include the email address they check most frequently on the FAFSA to ensure faster communication from the Department of Education. Specifically, students will receive a link where
they will be able to view the results of the data they submitted on their FAFSA. In addition, the financial aid office will use this email address to communicate with them until their official San Jacinto College email address has been assigned. All students are strongly encouraged to check their San Jacinto College email account at: www.sanjac.edu/email. San Jacinto College will only send electronic communications to this email account.

**Major Sources of Financial Aid**
For additional information about federal financial aid programs, including eligibility guidelines, students are encouraged to visit the Federal Student Aid website at www.studentaid.ed.gov (http://www.studentaid.ed.gov). For information about state assistance, students should visit the Texas Higher Education Coordinating Board website at www.collegefortexans.com (http://www.collegefortexans.com).

**Academic Requirements for Receiving Financial Aid**
The Higher Education Act of 1965 (as amended) and the Texas Higher Education Coordinating Board mandate institutions of higher education to establish a standard of satisfactory academic progress for a student to receive financial aid. This standard must apply to a student’s entire academic history whether financial aid was received or not. In order to remain eligible to receive aid at San Jacinto College, a student must meet these standards, as approved by the San Jacinto Community College District Board of Trustees.

**Satisfactory Academic Financial Aid Components**
San Jacinto College requirements for receiving financial aid include the following components:

1. **Grade Point Average (GPA) Component**
   San Jacinto College uses the 4.0 grade point average system and numerical code:

<table>
<thead>
<tr>
<th>GPA</th>
<th>Numerical Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>A</td>
</tr>
<tr>
<td>3.0</td>
<td>B</td>
</tr>
<tr>
<td>2.0</td>
<td>C</td>
</tr>
<tr>
<td>1.0</td>
<td>D</td>
</tr>
<tr>
<td>0.0</td>
<td>F or FX</td>
</tr>
</tbody>
</table>

   A student is expected to maintain a minimum cumulative GPA of 2.0 based upon the total number of hours attempted at San Jacinto College.

2. **Pass Rate Component**
   A student is expected to pass a minimum of 75 percent of all hours attempted at San Jacinto College. All, transfer hours are included in the pass rate calculation.

3. **Time Frame Component**
   A student receiving financial aid funds will be expected to complete his/her San Jacinto College educational objective or course of study within the first 90 hours attempted, including college preparatory and transfer hours.

   Grades of F, FX, I, NG, W, repeated courses, ESOL and college preparatory courses are counted in the total number of hours attempted. However, for repeated and ESOL courses, only the higher grade is used in computing the cumulative grade point average and pass rate. Students will not receive aid for the third attempt if the class has previously been passed unless the program of study requires students to take the course more than twice.

**Review Procedure**
Satisfactory academic progress will be measured for all students, not just students who apply for financial aid. Progress will be measured at the end of each term for all students who are enrolled in credit classes and when transfer work is evaluated. All students are expected to be in compliance with the academic requirements for receiving financial aid at the time they receive aid.

1. **Academic Standards and Pass Rate**
   The San Jacinto College financial aid office will determine whether or not students have successfully passed at least 75 percent of overall hours attempted. Students are required to maintain a minimum GPA of 2.0 on their institutional coursework. Grades of A through D will be considered as successfully passed. However, students on probation or academic plan status must pass all classes with a C or higher.

   Audited courses, credit earned by placement tests, repeated courses or programs not approved by the U.S. Department of Education are not eligible for financial aid funding.

2. **Time Frame Component**
   The financial aid office will determine the total number of hours a student has attempted. Courses for which a student has received an incomplete, from which they have withdrawn, which have been repeated and which are defined as college preparatory classes will be counted in the total. Once a student has attempted 90 hours, the student is ineligible to receive further consideration for financial aid. During the last term in which the student will reach the 90-hour limit, the student may receive aid for the number of hours for which they are enrolled.

**Transfer Students**
Under the San Jacinto College Academic Requirements for Receiving Financial Aid, transfer hours must be taken into account in determining whether or not a student is in compliance with the Time Frame and Pass Rate Components. Transfer hours are not used in the computation of GPA components. A transfer student must have a transcript from each college/university attended on file and must request to have the transcript(s) evaluated through the Admissions Office. A student who has attended a school outside the United States must also have the transcript(s) evaluated, at their own expense, by a foreign transcript evaluation company on a course by course basis.

**Warning**
A student who has not met Satisfactory Academic Progress, except for time frame component, will be placed on financial aid warning. A student, if otherwise eligible, may receive consideration for financial aid during the warning term.

**Suspension**
A student who fails to meet the standards of academic progress by the end of the term of warning will be placed on financial aid suspension and is not eligible to receive further consideration for financial aid.
Maximum Time Frame
A student who has attempted more than 90 hours will be placed on financial aid suspension for max hours attempted and is not eligible to receive further consideration for financial aid.

Probation
A student under this status is on an appeal and eligible for aid. Appeal students are required to meet appeal conditions to maintain eligibility, which includes following an academic plan.

Academic Plan
A student who completed and met the conditions of the appeal during the probation term but is still not making satisfactory academic progress will be placed on an Academic Plan. While on an Academic Plan, the student must continue to meet the conditions of their appeal within a specific point in time as stated on their educational plan.

Appealing Financial Aid Suspension/ Regaining Eligibility for Aid
A student who has been suspended from receiving financial aid due to a low GPA and/or Pass Rate Component may regain eligibility by:
- Enrolling at his/her own expense and bringing himself/herself into compliance with the requirements.
- Filing an appeal with the Financial Aid Office prior to the middle of the semester.

A student who has exceeded the maximum time frame component must file an appeal to be able to receive consideration for financial aid.

The appeal for all satisfactory academic progress components must be in writing and supporting documentation regarding special circumstances must be provided. Appeals are considered for extenuating circumstances such as injury, illness and death in the immediate family or undue hardship. A student must provide sufficient supporting information to explain their reason for lack of progress. Other documentation will be required in addition to what is listed on the appeal form. Students who have an Incomplete grade cannot submit an appeal until a final grade has posted.

If an appeal is approved, the student is placed on Financial Aid Probation for the term listed in the appeal. The student is required to meet the conditions stated on the approval letter without exception in order to continue receiving aid under the Academic Plan status. In addition, first-time appeal approval students are required to meet the conditions of the Program for Financial Education during their first term. If a student does not meet the conditions of the appeal, the student will be placed back on Financial Aid Suspension.

If an appeal is denied, the student may file a written request to meet with the Appeal Committee, which renders all decisions in writing. If the student needs to request a personal appearance, only the student is allowed to present their case to the committee.

Transfer Monitoring Students
Transfer Monitoring (TM) is the process by which schools must verify with the Department of Education through the National Student Loans Database System (NSLDS) a student’s eligibility for financial aid. Students are subject to transfer monitoring if they begin their study mid-year or during the summer at San Jacinto College. Per regulation, during the seven-day period after their name is added to the NSLDS TM list, the College may not authorize or disburse Title IV aid to their account. It may take longer than seven days if, through NSLDS, any issues are identified that need to be resolved. During the seven-day NSLDS review, financial aid funds are not available to students and funds will not show on their financial aid file even if previously offered. Students may determine when their file was put on TM hold and when it will go off hold by accessing their SOS account.

Students may take the following steps to check on their status:
1. Log into SOS
2. My Registration, Financial Aid & Student Record
3. My Student Record
4. View Holds

Any aid awarded to a student whose record goes on TM hold will be automatically reinstated after the seven-day period, unless there is an unresolved issue.

Withdrawals, Grades and the Return of Title IV Funds
Return to Title IV (R2T4) applies if the student completely withdraws, officially or unofficially, from classes prior to completing more than 60 percent of the term and parts of term in which the student enrolled. Also, if the student receives any combination of FX (Failure due to non-attendance) and grades of F or W, they are subject to R2T4. Students receiving federal monies to fund their college education are subject to the R2T4 calculation. Federal guidelines require the student (and parent in the case of a PLUS Loan) and/or institution to repay any unearned portion of the federal funds credited or disbursed.

The federal funds that are subject to the R2T4 calculation are the Pell Grant, Federal Supplemental Education Opportunity Grant (SEOG), Subsidized and Unsubsidized Direct Loans and Parent Loans for Undergraduate Students (PLUS).

Additional Restrictions for Subsidized, Unsubsidized, and PLUS Loans
Subsidized and Unsubsidized Direct Loans and Parent Loans for Undergraduate Students (PLUS) have additional restrictions. Students and parents may owe the College any loan amount certified and disbursed due to any indebtedness created by the return calculation whether or not the student officially or unofficially withdraws.

Official Withdrawals
Official withdrawal occurs when the student completes the withdrawal process through the web, the Admissions office or the Educational Planning, Counseling and Completion office. The student is considered to have officially withdrawn from San Jacinto College when all courses are dropped for the semester. After the student is withdrawn, the Financial Aid office calculates the amount of earned and unearned aid for the period of enrollment. Notice will be sent to the student at the address on record if any indebtedness is created by the withdrawal and a copy is uploaded to the student’s record in SOS.

Unofficial Withdrawals
Any student who fails to successfully complete at least one class due to non-attendance during the period of enrollment is considered to have
unofficially withdrawn. After grades are posted at the end of each term, the Financial Aid office completes a Return to Title IV Calculation (See the Withdrawals, Grades and the Return of Title IV Funds section.) If San Jacinto College cannot determine the last date of attendance, the mid-point of the student’s enrollment will be used as the withdrawal date.

### Attendance

Students are required to attend their classes and complete their assignments, including assignments in Blackboard for online classes, throughout the semester. Those who fail to meet this requirement will have their aid adjusted.

San Jacinto College reviews attendance after the census and middle of the semester. Students who fail to attend any class meetings as of the census date will lose their Financial Aid eligibility for those classes. Students who stop attending prior to the 60 percent point of the semester will lose part or all of their Financial Aid eligibility. If students manage to be successful for those classes, they can receive a retroactive disbursement at the end of the term for the classes in question. Otherwise, students will have to enroll in classes that start in later parts of term within the same semester to regain their financial aid eligibility.

Attendance for online/distance learning classes is defined by the U.S. Department of Education as participating in class or being engaged in an academically related activity such as contributing to the class online discussion board. Documenting that a student has logged into an online class is not sufficient by itself to demonstrate academic attendance by the student.

### Debts to the Department of Education

If the student owes the Department of Education, the eligibility to receive federal aid at any school will be lost until the debt is repaid or acceptable repayment arrangements are made with the National Payment Center of the Department of Education. San Jacinto College will assign any debt due to the Department of Education for processing.

### Debts to San Jacinto College

Funds owed to San Jacinto College are subject to San Jacinto College collection procedures.

**Note:** Once tuition and fees are paid or financial aid is applied, students are considered officially registered until they complete the term or officially withdraw. Students who have never attended class or classes are not eligible for financial aid funds. Students must submit withdrawal requests electronically or in person at the Admissions Office or the Educational Planning, Counseling and Completion offices. (See the Official Withdrawal section.) Students are urged to take class enrollment and attendance seriously; consider the amount of time required to successfully complete a class and plan the number of hours in which they enroll. If need be, students must officially withdraw; simply not attending class or telling the instructor does not constitute withdrawal.

### Fraud or Financial Aid Abuse

San Jacinto College is required by U.S. Department of Education Office of the Inspector General to report all cases where activities are perceived to be potential fraud or abuse of federal funds.

### Types of Financial Aid Programs

#### Grants (Aid That Does Not Have to Be Repaid)

**Federal Pell Grants** are available to students who demonstrate financial need within the established federal guidelines. To determine need, the U.S. Department of Education uses a standard formula established by Congress to evaluate the information students and/or their parent/spouse provide on the FAFSA. The formula produces an Expected Family Contribution (EFC) that is an indication of how much a student’s family is expected to financially contribute toward the cost of their education. For those who qualify, the Pell Grant is intended to be the primary award of their financial aid package and is the starting point for financial assistance at San Jacinto College. Pell Grants are awarded only to the undergraduate student who has not earned a bachelor’s or professional degree from any institution including foreign schools. The amount of aid is based upon the number of hours enrolled and the EFC.

**Federal Supplemental Educational Opportunity Grant (FSEOG)** is limited by the availability of funds and is only awarded to those with exceptional financial need. Priority will be given to Federal Pell Grant recipients.

**Texas Public Education Grant (TPEG)** is authorized by the State of Texas from tuition revenues generated by San Jacinto College. TPEG is available to those who demonstrate financial need. The amount of the award varies depending upon residency, the number of hours enrolled and the availability of funds.

**Texas Educational Opportunity Grant** is also a need-based grant authorized by the State of Texas. To receive consideration, students must be Texas residents, be enrolled in a certificate or associate degree plan at a two-year institution have an EFC no greater than $5,609 for the Initial Year or demonstrate financial need for the Renewal Year (as determined by a standard need-analysis process), not have been convicted of felonies or crimes involving controlled substances, not have an associate or baccalaureate degree and not be concurrently receiving a TUES Grant. The amount of TEOG paid is based upon the number of hours enrolled.

**Note:** Students who are transferring to San Jacinto College and are eligible to receive a Renewal Texas Educational Opportunity Grant must notify the campus financial aid services office by Oct. 1 for the fall and by Feb. 1 for the spring or eligibility to receive consideration will be forfeited.

Funding for all grant funds, except Pell Grant, is limited and subject to availability. Not all students who qualify will receive a grant.

### Loans (Aid That Must Be Repaid)

The **William D. Ford Direct Loan Program** allows students or parents to borrow loan funds directly from the Federal Government. Direct Lending provides two types of education loans that are used by many San Jacinto College students and parents. The Direct Subsidized and Unsubsidized Loans are available to students, while the Direct Parent Loan for Undergraduate Students (PLUS) is available to parents of undergraduate students. Both loans require that students enroll in a degree program at the half-time level or above. Loans cannot be disbursed to first-time, first-year borrowers prior to thirty(30) days from the start of the semester.

The **Direct Loan Subsidized** is a low-interest, long-term loan available if students demonstrate financial need. Students are not charged interest before repayment begins or during authorized periods of deferment. The
federal government “subsidizes” the interest during these periods while students are enrolled at least half-time (six semester credit hours).

First-time borrowers are subject to regulations from the Dept. of Education that may affect subsidized loan eligibility. This regulation applies to subsidized (not unsubsidized or PLUS) loans disbursed to first-time borrowers on or after July 1, 2013. First-time borrowers are defined uniquely for the new 150 percent rule: the student has no outstanding balance of principal or interest on a loan or the student has previously received loans which are paid in full. If the student is a first-time borrower under this law, they are only eligible for the subsidized loan for a period of 150 percent of the published program. Visit studentloans.gov (http://studentloans.gov) for more details on this law.

The Direct Loan Unsubsidized is not awarded on the basis of demonstrated financial need, and is available to an independent student or a qualified dependent student who needs additional assistance. Students will be charged interest from the time the loan is disbursed until it is paid in full. If students allow the interest to accumulate while in school or during periods of nonpayment, it will be capitalized—that is, the interest will be added to the principal amount of the loan when it enters repayment and additional interest will be based upon the higher amount.

Direct Parent Loans to Undergraduate Students (PLUS) are available to parents of dependent students not to exceed the cost of attendance, minus any financial aid awarded to students. These loans have a higher interest rate and the borrower is responsible for paying all the interest that accrues. A credit check is required for a Parent Loan. Dependent students whose parents have been denied a PLUS Loan may qualify for up to $4,000 in unsubsidized Federal Direct Loan funds.

Loan Application Process begins with the student completing the FAFSA and submitting the San Jacinto College District Loan Request Form. Before funds are disbursed, students must sign their Master Promissory Note (MPN) and complete their entrance counseling session at www.studentloans.gov (http://www.studentloans.gov).

To apply for the Direct PLUS, students must complete the FAFSA and parents must complete the loan certification request at www.studentloans.gov (http://www.studentloans.gov). Before funds are disbursed, parents must sign their Master Promissory Note (MPN) and complete an adverse credit counseling session, if necessary.

Students awarded direct loans who graduate or drop below half-time enrollment status are required to complete an exit counseling session. The exit counseling session helps students understand their rights, responsibilities and repayment options as a borrower. Students must log on to www.studentloans.gov (http://www.studentloans.gov) to complete the exit counseling session and learn about repayment options.

Students may borrow additional loan funds through private lenders. These alternative loans are subject to different requirements and interest rates than Direct Loans. Once the alternative loan has been certified by San Jac, it is subject to a recission period that may be up to 14 days depending on your lender. The recission period is determined by the lender. If the loan has been certified and the recission period has been met, the student can expect a disbursement from the alternative loan on the same schedule as a direct loan. If there are any outstanding requirements specific to the student’s alternative loan, the disbursement may occur after the direct loan disbursement dates. A list of lenders who have conducted business with San Jacinto College can be found on the San Jacinto College Financial Aid web page.

Note: Students who have previously borrowed Subsidized and Unsubsidized or PLUS loans under the FFEL program will graduate owing loan amounts to two different entities.

Scholarships (Aid That Does Not Have to Be Repaid)

A variety of scholarships, many funded through the San Jacinto College Foundation, are available from both institutional and private sources. Scholarship selection criteria may be based on demonstrated need, academic merit or other specific qualifications, depending on the funding source. The funding source also determines the amount of the scholarship award. During certain times of the year, an online San Jacinto College Foundation scholarship application is available. Fall scholarship applications open in February and close in June. Spring scholarship applications open in August and close in October. Please visit www.sjcd.academicworks.com (http://www.sjcd.academicworks.com).

All scholarships must be reported to the Financial Aid Office. For additional information, students are encouraged to contact the San Jacinto College Foundation well in advance of these dates.

Employment (Aid That Must Be Earned)

Students must inform the College if they want to participate in the Federal Work Study (FWS) program.

Federal Work Study (FWS) is a federal work program that provides part-time on-campus employment to students if they demonstrate financial need. Students will earn at least minimum wage (many jobs pay more) and may work up to 19.5 hours per week. Information regarding employment opportunities for Federal Work Study can be obtained at each campus career and employment center. It is important to remember, an offer of FWS does not guarantee a job or job placement.

Part-time employment is available through various departments and/or the Career Services Center. Students should contact the appropriate campus office for additional information.

How Aid is Disbursed

San Jacinto College has changed from a single disbursement to three disbursements per term. This is based on a sixteen-week term. Other parts of term may increase or decrease the number of disbursements.

Residency

Residence Status for Tuition Purposes

Rules and Regulations for determining residence status are set by the Texas Education Code, Section 54.051(b) which may be viewed at www.statutes.legis.state.tx.us/ (http://www.statutes.legis.state.tx.us) and the Texas Higher Education Coordinating Board Rules 21.727 at www.thecb.state.tx.us/ (http://www.thecb.state.tx.us).

For tuition purposes, students are classified as a Texas resident, a Texas resident in-district, a non-Texas resident/out-of-state or a non-Texas resident/out-of-country student. Determination of a student’s residence status is made in accordance with the laws of the state of Texas.

During the admission process, all students answer the Texas Common Core questions for residency in order to provide for determination of their status as either a Texas resident, non-resident or international student.
**Relevant Definition**

**Domicile:**

- A person's principal, permanent residence to which the person intends to return after any temporary absence.

**Dependent** – A person who:

- is less than 18 years of age and has not been emancipated by marriage or court order; or
- is eligible to be claimed as a dependent of a parent of the person for purposes of determining the parent's income tax liability under the Internal Revenue Code of 1986.

Students who are considered dependents will use residency based on their parents' or legal guardians' eligibility for Texas residency using the scenarios listed below.

**Texas Resident**

The following persons shall be classified as Texas residents and entitled to pay resident tuition at all Texas public institutions of higher education:

1. A qualifying person who:
   a. graduated from a public or accredited private high school in this state or, as an alternative to high school graduation, received the equivalent of a high school diploma in this state, including the successful completion of a nontraditional secondary education, and
   b. maintained a residence continuously in this state for the 36 months immediately preceding the date of graduation or receipt of the diploma equivalent, as applicable; and the 12 months preceding the census date of the academic semester in which the person enrolls in an institution.

2. A qualifying person who:
   a. established domicile in this state not less than 12 months before the census date of the academic semester in which the person enrolls in an institution; and
   b. maintained domicile continuously in the state for the 12 months immediately preceding the census date of the academic semester in which the person enrolls in an institution.

3. A qualifying dependent whose parent:
   a. established domicile in this state not less than 12 months before the census date of the academic semester in which the person enrolls in an institution; and
   b. maintained domicile continuously in the state for the 12 months immediately preceding the census date of the academic semester in which the person enrolls in an institution.

The student has the burden of proof to show by clear and convincing evidence that residence or domicile, as appropriate, has been established and maintained.

**Non-U.S. Citizens Eligible to Establish Texas Residency**

Non-U.S. Citizens who are eligible to domicile in the U.S. must prove they have lived in Texas for one year and show proof of their eligibility to domicile.

Permanent residents of the United States may be asked to furnish their permanent resident (green) card or I-551 passport approval stamp.

An eligible non-immigrant who has filed an application for permanent residency must provide the original Notice of Action with an approval notice.

An eligible non-immigrant that is eligible to establish domicile in the United States may be eligible for classification as a Texas resident. The Texas Higher Education Coordinating Board has identified eligible students to be:

1. holders of unexpired visas with A-1, A-2, A-3, E-1, E-2, G-1, G-2, G-3, G-4, G-5, H-1B, H-4 (dependent of H-1B only), I, K-1, K-2, L-1A, L-1B, L-2N-8, N-9, NATO 1-7, O-1, O-3 (dependent of O-1 only), P-1, P-2, P-3, P-4, T-4, TPS, U-1, U-2, U-3, U-4, V-1, V-2, V-3, or
2. individuals classified by the INS as asylees, parolees, refugees, permanent residents, conditional permanent residents and temporary residents holding an I-688 or I-688B Temporary Resident card that has not expired.

**Undocumented Immigrants**

Undocumented immigrants who meet academic admission requirements will be permitted to enroll but normally will be subject to the tuition rate applicable to non-residents. Undocumented immigrants may qualify for the tuition rate applicable to the residents of Texas if all four of the following qualifications are met and adequate proof is provided:

1. Graduated or will graduate from a Texas high school or received a High School Equivalency certificate in Texas.
2. Resided in Texas for at least three years leading up to graduation from high school or receiving a Texas High School Equivalency.
3. Reside or will have resided in Texas for the 12 months immediately preceding the census data of the semester to be enrolled.
4. Provide to the institution an affidavit stating that the individual will file an application to become a permanent resident at the earliest opportunity the individual is eligible to do so.

**Texas Resident Out-of-District**

Refer to rules in the Texas Resident section above. Students must first meet all qualifications in that section.

A resident student will be designated with an out-of-district residency classification if the student or eligible person upon whom the dependent student is basing their residency resides outside of the San Jacinto College taxing district, as determined by the Harris County Appraisal District.

**Texas Resident In-District**

Refer to rules in the Texas Resident section above. Students must first meet all qualifications in that section.

A resident student will be designated with an in-district residency classification if the student or the eligible person upon whom the dependent student is basing their residency resides inside the San Jacinto College taxing district, as determined by the Harris County Appraisal District (www.hcad.org or http://www.hcad.org) or tax documents. Post office boxes cannot be used to designate a student as Texas-resident in-district. The San Jacinto College taxing district generally includes the following independent school districts: Channelview, Deer Park, Galena Park, La Porte, Pasadena and Sheldon.

**Reclassification of Texas Resident Status**

Students may request a reclassification of Texas Resident status by visiting the Educational Planning, Counseling and Completion office when
their permanent address changes. When changing an address, students must complete and sign a change-of-address form and if changing to an in-district address, must provide documentation connecting them to the in-district address such as a current apartment lease, property tax documents, current utility bill in the student’s name or current utility bill in the parent(s) name(s) and the income tax documents showing the student is being claimed as a dependent. Students requesting a reclassification of the Texas resident status prior to the census date for the current term may have the change applied to the current term’s tuition status. Requests received after the census date will be effective for the following term.

Documentation for Texas Resident Status

Although not conclusive or exhaustive, documentation indicating the following circumstances existed throughout at least 12 consecutive months immediately preceding the census date of the semester in which a person seeks to enroll may lend support to a claim regarding his/her intent to establish and maintain domicile in Texas.

- Sole or joint marital ownership of residential real property in Texas by the student or the dependent’s parent, having established and maintained domicile at that residence;
- Ownership of a business by the student or the dependent’s parent in Texas;
- Gainful employment in Texas by the student or the dependent’s parent;
- Marriage by the student or the dependent’s parent to a person who has established and maintained domicile in Texas.

If, as the answers to the core questions are reviewed by College officials, there remains a question as to the student’s proper residency classification, the student must provide a copy of one or more appropriately dated documents which will establish Texas residency. For more information, please refer to the Texas Higher Education Coordinating Board website (http://www.collegeforalltexans.com/index.cfm?objectid=6D1466D9-AEA5-DE00-C12F3F75E7367718).

The institution is charged to obtain necessary documentation that conclusively confirms the student’s actual residence. Any address change that causes a reduction in tuition must be accompanied by appropriate documentation. When returned mail or other occurrences raise questions about the validity of the student’s address or when conflicting information exists, additional documentation will be required. Students will be allowed to register but will be charged at the higher rate until required documentation is provided.

For a complete list of documentation that may be required, please refer to the Texas Coordinating Board website. The Educational Planning, Counseling & Completion Office or Admissions Office is the final authority on all questions and decisions regarding residency classification for tuition purposes.

Non-Texas Resident

A student or dependent student who resides or whose parent or legal guardian resides out of state or has not established domicile in the state for the 12 months prior to the official reporting date of the semester in which the student is registering is considered a non-Texas resident.

A non-resident who marries a Texas resident must establish his/her own residency.

Visa: Students who have lived in Texas for the 12 months prior to the official reporting date of the semester, but do not have a Visa status that allows them to domicile will be coded as out-of-country.

Reclassification: To be reclassified as a resident (after one or more years of residency), eligible students must show proof of intent to establish Texas as their permanent legal residence. Refer to Texas Resident section of the Texas Higher Education Coordinating Board Rules for a list of support documentation.

Military Personnel

Military personnel or their families should check with the Veteran Services and/or refer to the rules found in the Texas Education Code at www.statutes.legis.state.tx.us and Texas Higher Education Coordinating Board Rules at www.thecb.state.tx.us for requirements on resident tuition. Current military identification, military orders or a DD-214 may be required to receive resident tuition.

Tuition and Fees

Tuition and Fee Schedules

This schedule is subject to change by the Texas Legislature and the San Jacinto Community College District Board of Trustees.

Texas Resident Reduced Tuition and Fees (TID) (In-District) (TFEE) (Technology Fee)

Tuition $50 and a $2 technology fee per credit hour.

<table>
<thead>
<tr>
<th>In-District Credit Hours</th>
<th>Tuition &amp; Tech Fee</th>
<th>Gen SVC Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$52</td>
<td>$150</td>
<td>$202</td>
</tr>
<tr>
<td>2</td>
<td>$104</td>
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<td>3</td>
<td>$156</td>
<td>$150</td>
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<td>4</td>
<td>$208</td>
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<td>$358</td>
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<tr>
<td>5</td>
<td>$260</td>
<td>$150</td>
<td>$410</td>
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<tr>
<td>6</td>
<td>$312</td>
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<td>$670</td>
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<tr>
<td>11</td>
<td>$572</td>
<td>$150</td>
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<tr>
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<td>$150</td>
<td>$774</td>
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<tr>
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<td>$676</td>
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<tr>
<td>14</td>
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<td>$150</td>
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<tr>
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<tr>
<td>17</td>
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<tr>
<td>20</td>
<td>$1,040</td>
<td>$150</td>
<td>$1,190</td>
</tr>
</tbody>
</table>

In addition to tuition and fees, other fees will be charged for some classes.
### Estimated Resident In-District Student Expenses

<table>
<thead>
<tr>
<th>Based on the Following Semester Hours</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$462</td>
<td>$618</td>
<td>$774</td>
<td>$930</td>
</tr>
<tr>
<td>Lab Fee (based on two courses @ $15 per course)</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
</tr>
<tr>
<td>Books (based on one book @ $175 for each course)</td>
<td>$350</td>
<td>$525</td>
<td>$700</td>
<td>$875</td>
</tr>
<tr>
<td>Total per Semester</td>
<td>$842</td>
<td>$1,173</td>
<td>$1,504</td>
<td>$1,835</td>
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<tr>
<td>Incremental Increase</td>
<td>$331</td>
<td>$331</td>
<td>$331</td>
<td></td>
</tr>
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</table>

### Estimated Resident Out-of-District Student Expenses

<table>
<thead>
<tr>
<th>Based on the Following Semester Hours</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$732</td>
<td>$1,023</td>
<td>$1,314</td>
<td>$1,605</td>
</tr>
<tr>
<td>Lab Fee (based on two courses @ $15 per course)</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
<td>$30</td>
</tr>
<tr>
<td>Books (based on one book @ $175 for each course)</td>
<td>$350</td>
<td>$525</td>
<td>$700</td>
<td>$875</td>
</tr>
<tr>
<td>Total per Semester</td>
<td>$1,112</td>
<td>$1,578</td>
<td>$2,044</td>
<td>$2,510</td>
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<tr>
<td>Incremental Increase</td>
<td>$466</td>
<td>$466</td>
<td>$466</td>
<td></td>
</tr>
</tbody>
</table>

### Texas Resident Tuition Rate (TOD) (Out-of-District) (TFEE) (Technology Fee)

Tuition $95 and a $2 technology fee per credit hour.

<table>
<thead>
<tr>
<th>Semester Credit Hours</th>
<th>Tuition &amp; Tech Fee</th>
<th>Gen SVC Fee</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<tr>
<td>7</td>
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<td>$873</td>
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In addition to tuition and fees, other fees will be charged for some classes.

### Out-of-State and Other Non-Resident Tuition and Fees (TOS, TIS, TUV) (TFEE) (Technology Fee)

Tuition $160 and a $2 technology fee per credit hour.

<table>
<thead>
<tr>
<th>Out-of-State Credit Hours</th>
<th>Tuition &amp; Tech Fee</th>
<th>Gen SVC Fee</th>
<th>Total</th>
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</table>

In addition to tuition and fees, other fees will be charged for some classes.
Estimated Out-of-State and Other Non-Resident Student Expenses

<table>
<thead>
<tr>
<th>Based on the Following Semester Hours</th>
<th>6</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
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Additional Expenses

Students must purchase their own textbooks, workbooks and supplies such as paper, pencils and computer storage media. Some courses also include the a textbook and/or will also require that students buy special supplies.

Fees Per Term

1. General Service Fee (GSF)—The general service fee supports functions that contribute to a student's educational experience outside of the classroom while tuition primarily covers a portion of the instructional classroom experience. The general service fee is charged to cover the support of maintenance of instructional labs; the support of cultural programs, intramural sports and other student programs; and the support of student services, including library, financial aid, enrollment orientation, educational planning, student engagements and activities, career and employment services and accessibility services. A fee of $150 is charged each fall, spring or summer term. This fee is nonrefundable unless the student withdraws from all courses. The refund is prorated based on the published refund schedule.

2. Schedule Change Fees—Schedule changes made prior to the first day of class do not incur a fee. Any class changes on or after the first class day of the term are subject to the College refund policy which allows a maximum refund of 70 percent of tuition charges once the term or session has begun. Class changes are considered processed at the time of data entry. The student is considered liable for the appropriate charges. (See Refund Table for list of charges.)

3. Incidental Fees—Incidental fees are accounted for as other designated funds and as such funds reflect the reasonable cost of materials or services for which the fee is collected. These include, but are not limited to, flight fees, testing fees and personal equipment fees. An Incidental Fees chart appears later in this section. Incidental Fees are subject to change.

4. Lab Fees—A laboratory fee is collected in an amount sufficient to cover the general cost of the laboratory materials and supplies used by a student. The amount does not exceed the lesser of $24 per semester credit hour of laboratory course credit or the cost of actual materials and supplies used by the student. A lab fee chart appears later in this section. Lab fees are subject to change.

5. Course Fees (01F-26F)—A course fee is a fee of $2 to $7 per semester credit hour to maintain program quality, including retaining faculty and staff and enhancing services, including equipment and technology. A course fee chart appears later in this section. Course fees are subject to change.

6. Technology Fee (TFEE)—A technology fee of $2 per semester credit hours funds software, hardware and labor to provide expanded internet bandwidth, increasing cyber security measures, and undergirds the overall reliability of the College’s electronic presence.

7. Distance Learning Fee (EDL6 and EDLH)—A $30 distance learning fee is assessed to each course in which the instruction is delivered 100% online (EDL6) and a $15 distance learning fee is assessed to each course in which the instruction is delivered in the online/classroom format (EDLH). The distance learning fees support the functional areas of the College including personnel costs, equipment, and services to provide for the delivery of the distance learning instructional courses.

8. Parking Permit—Each student will be entitled to a parking permit by submitting a completed parking application to any campus business office at the time of registration and application of payment. Additional or replacement parking permits may be obtained from any campus business office. A parking permit must be displayed on each automobile parked on any San Jacinto College campus by a student or for the benefit of a student. A fine will be imposed on any student who fails to comply with parking regulations.

9. Liability Insurance (ELI)—There is a $7 charge per term per class for some allied health clinical courses, such as dietetics technician as well as cosmetology and massage therapy lab courses.

10. International Student Processing Fee (EFS)—$35. This fee is assessed to students holding F-1 Visas each term of enrollment.

11. Repeat Course Fee (T3PT)—San Jacinto College will charge an additional tuition of $60 per credit hour to any course that a student has already attempted twice and appears on their transcript. This additional tuition charge will be assessed for all registered students as applicable.

Excess Credit Hours for Undergraduate Students (30-Hour Rule)

Effective May 9, 2006, college students who have attempted 30 or more credit hours beyond the minimum number of hours required for their baccalaureate degree requirements at a Texas public senior college or university may be charged additional tuition, up to the level of that institution’s out-of-state charges.

This rule applies to all credit hours in which a student was registered as of the official census day for the term (i.e., 67, dual credit courses, failed courses and courses from which the student withdrew after census day). Students enrolled as undergraduates in the fall term of 1999 or later could be affected.

Exceptions include:

- a student's credit hours received during any term prior to the fall 1999 term;
- hours earned through examination;
- hours from college preparatory, technical courses, workforce education courses or other courses that would not generate academic credit that could be applied to a degree at the institution;
hours earned at a private or out-of-state institution;
any hours removed from admission consideration under Academic Fresh Start (Texas Education Code §51.931); and
any hours not eligible for formula funding.

Non-resident students paying tuition at the rate provided for Texas residents are subject to the same limitations as hours generated by resident students.

Texas Education Code §54.014 (§54.068 renumbered in 2006) as updated on July 5, 2006, reflecting changes from the 79th legislative session (House Bill 1172 and Senate Bill 1528, available at www.capitol.state.tx.us) established this option for public senior colleges and universities.

Repeated Courses and Unfunded Credit Hours
Repeat Course Fee for Third Repeat
San Jacinto College will charge a higher tuition rate to students registering for a course for the third or subsequent time. This charge will apply to any course that the student has already attempted twice and appears on their transcript. Upon the third or subsequent enrollment, an additional tuition of $60 per credit hour will be charged. This additional tuition charge will be assessed for all registered students as applicable.

Students may be charged a higher tuition rate, not to exceed the non-resident undergraduate charge, in the following circumstances:

- Repeated hours for attempted course: Credit hours for the same course (or a course substantially similar to an earlier course) previously attempted, but not completed (no grade received) for three (3) or more times at the same institution, are not eligible for state reimbursement. Institutions may, with the third and subsequent enrollments, charge an increased tuition rate, not to exceed that charged to non-resident undergraduate students to compensate for the loss of state formula funding.
- Repeated hours for completed courses: Institutions may also charge students enrolling for the second time in a previously completed course at the same institution an increased tuition rate, not to exceed that charged to non-resident undergraduate students. A completed course is one for which a grade of A, B, C, D, F, FX or Pass/Fail was earned. This rule applies to all credit hours for classes previously completed regardless of whether the hours may be submitted for formula funding from the state.

The following types of credit hours are exempt and are not subject to these rules:

1. Hours earned by a student prior to receiving a baccalaureate degree that were awarded previous to the effective date of these changes.
2. Hours earned through examination or similar methods without registering for a course.
3. Hours from college preparatory courses, technical courses, workforce education courses or other courses that would not generate academic credit that could be applied to a degree at a senior institution.
4. Hours earned by the student at a private institution or an out-of-state institution.
5. Any credit hours not normally eligible for state formula funding.

Texas Higher Education Coordinating Board Rule §13.100-13.109, effective Nov. 22, 2005, reflects changes from the 79th legislative session for public higher education institutions in Texas and amendments to Texas Education Code §54.068 and §61.0595.

Tuition Rebate Program
Students transferring to a Texas senior college or university may qualify for a $1,000 rebate if they have attempted no more than three semester credit hours above the minimum number of hours required for their baccalaureate degree. Attempted hours include every course for which the student has registered as of the official census date in every term, including: college preparatory courses taken for credit, repeated courses and courses from which the student withdraws and all credit by examination, except for the first nine hours and dual credit courses. Students initiating their undergraduate education at San Jacinto College should carefully follow approved degree plans in order to maintain eligibility for this program. Senior universities are required to provide students with forms and instructions for requesting the rebate at the time the student applies for a baccalaureate degree.

Texas Education Code §54.0065 established this tuition rebate program for certain undergraduate students, according to legislation passed in 1997 by the 75th Texas Legislature and amended in 2003 by the 78th Texas Legislature. The website www.collegefortexans.com includes more detailed information about the tuition rebate program and also includes a directory of institutional contacts.

Course Fees

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STUDENT INFORMATION

- Academic Calendar (p. 406)
- Annual Security and Fire Safety Report (p. 406)
- Campus Carry (p. 406)
- How to Request Public Information (p. 409)
- Registration (p. 409)
- Services and Activities (p. 412)
- Student Grades and Records (p. 415)
- Student Rights and Responsibilities (p. 428)
- Veteran Information (p. 440)

Academic Calendar

Please refer to the San Jacinto College website link below for the most recent academic calendar.

www.sanjac.edu/academic-calendar

Annual Security and Fire Safety Report

The San Jacinto Community College District is committed to assisting all members of the San Jacinto College community in providing for their own safety and security. In accordance with the Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, the annual security compliance document is available on the San Jacinto College Police Department, website at www.sanjac.edu/security-report. Crime statistics for the past three years are also available at: http://ope.ed.gov/campussafety/#!/.

A hard copy of the San Jacinto College Annual Security and Fire Safety Report is available for review at each of the four campus police departments.

Central Campus
Maintenance/Police Building
C34.105
8060 Spencer Highway
Pasadena, Texas 77505

North Campus
Slovacek Student Center
N12.205
5800 Uvalde Road
Houston, Texas 77049

South Campus
J.D. Bruce Student Center
S11.100
13735 Beamer Road
Houston, Texas 77089

Maritime Technology and Training Center
Maritime Campus
M1.210g
3700 Old Highway 146
La Porte, Texas 77571

The website and report contain information regarding campus security and personal safety, including topics such as: crime prevention; College police law enforcement authority; crime reporting policies; disciplinary procedures; and other matters of importance related to security on our campuses. They also contain information about crime statistics for the three previous calendar years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by San Jacinto College; and on public property within, or immediately adjacent to and accessible from, the campuses.

Campus Carry

Purpose

The purpose of this policy is to comply with the requirements of S.B. 11, which is generally referred to as the “campus carry” law, to allow the concealed carrying of handguns by license holders on the campuses of certain institutions. The policy grants permission for a valid Texas License to Carry holder (LTC) to generally carry a concealed handgun on campus. The policy also identifies certain campus locations and activities that a valid LTC holder may be excluded from carrying a handgun due to previously existing State of Texas Statutes or exclusion zones identified by the College.

Policy Statement

The San Jacinto Community College District is committed to providing a safe environment for students, employees, affiliates and visitors and to respecting the right of individuals licensed to carry a handgun in the state of Texas. Individuals licensed to carry may do so on campus except in locations and at activities prohibited by law or by this policy. The carrying of any handgun by an unlicensed person or the open carry of a handgun is not permitted in any place at the College.

1. Individuals who hold a valid Texas License to Carry a Handgun (LTC), including a valid Texas Concealed Handgun License, (“license holders”) may (1) carry a handgun on campus so long as the handgun is not in plain view, on or about their person at all times and under their control (e.g., purse, backpack, bag, etc.) or (2) secure their handgun in a locked motor vehicle. The carrying of an unconcealed handgun on campus is restricted to authorized law enforcement officers and other persons who may be designated by appropriate law enforcement agencies.

All other weapons are strictly prohibited for students, faculty, staff and visitors; their possession on campus is grounds for immediate action by law enforcement. See Section 46.05 of the Texas Penal Code for a list of weapons.

A license holder’s handgun must be concealed at all times. In compliance with Texas Penal Code §46.035(a-1), a license holder may not carry a partially or wholly visible handgun on campus premises or on any college driveway, street, sidewalk or walkway, parking lot, parking garage or other parking area. Anyone intentionally or knowingly displaying a handgun in plain view for others to see is in violation of Texas law.

A license holder must display his or her License to Carry when directed by a law enforcement officer in accordance with section 411.205 of the Texas Government Code. Otherwise, an individual is not required to disclose whether he or she is a license holder in order to participate in any program or service offered by the College, except as required by law.
A license holder may not carry a handgun if he/she is intoxicated under Texas Penal Code §46.035(d).

2. It is the responsibility of license holders to carry their handguns on or about their person at all times. “About” the person means that a license holder may carry a holstered handgun in a backpack or handbag, but the backpack or handbag must be close enough that the license holder can grasp it without materially changing position. A license holder who carries a handgun on campus must carry it in a holster that completely covers the trigger and the entire trigger guard area. The holster must have sufficient tension or grip on the handgun to retain it in the holster even when subjected to unexpected jostling.

The College does not provide storage for handguns.

3. The College is often the site of Pre-K-12 school-sponsored activities, such as field trips. When a Pre-K-12 school-sponsored activity is conducted at a particular location, the carrying of concealed handguns is prohibited. A sign shall be posted reading “Pre-K-12 school-sponsored activity in progress” during these activities. “School-sponsored activities” for purposes of this policy are defined as: tours, demonstrations, field trips, events, clubs, camps, clinics, programs, etc., held on College property that are authorized by a K-12 school district or individual school(s) as a curricular, co-curricular or interscholastic activity and are managed or supervised in part by the district or school or district or school employee.

Upon a survey of the College campuses, areas identified as routinely hosting such school-sponsored activities shall be posted on the College’s rules and regulations regarding campus carry.

4. Texas Penal Code §46.03(a)(2) excludes license holders of handguns from carrying a handgun on premises of a polling place on the day of an election or while early voting is in progress according to Policy 2-19. A sign shall be posted at any polling place located on campus from the commencement of early voting through Election Day that reads either “Polling Place” or “Vote Here.” (See Electioneering Procedure 2-19A)

5. Texas Penal Code §46.035(b)(6) excludes license holders of handguns from carrying a handgun on the premises of a church, synagogue or other established place of religious worship. A sign shall be posted that conforms to Section 30.06 of the Texas Penal Code.

6. Texas Penal Code §46.035(b)(2) excludes license holders of handguns from carrying a handgun where a high school, collegiate or professional sporting event or interscholastic event is taking place, unless the license holder is a participant in the event and a handgun is used in the event. Notice shall be given for all collegiate sporting events. If possible, for ticketed sporting events this notice should be given by means of a written communication on the back of or appended to, the ticket. Vendors and others who are permitted to enter the premises without a ticket shall be provided written notice through other means. A sign shall be posted that conforms to Texas Penal Code, Section 30.06.

7. The concealed carry of handguns shall be prohibited in areas for which state or federal law, licensing requirements or contracts require exclusion at the exclusive discretion of the state or federal government or are required by a campus accrediting authority. Where appropriate, signage must conform to the overriding federal or state law requirements. Otherwise, notice conforming to Texas Penal Code §30.06 must be provided.

8. The concealed carry of handguns shall be prohibited in patient-care areas, including those in which professional mental health and counseling services are provided. A sign shall be posted that conforms to Texas Penal Code, Section 30.06.

9. The concealed carry of handguns shall be prohibited in areas in which formal hearings are being conducted pursuant to Code of Student Conduct (Student Handbook); Academic Hearings; Veterans Appeal Hearings; Financial Aid Appeal Hearings; Employee Hearings; and Employee Grievances. A sign shall be posted that conforms to Texas Penal Code, Section 30.06.

10. The concealed carry of handguns shall be prohibited in areas where the discharge of a firearm might cause great harm, such as laboratories with extremely dangerous chemicals, biologic agents, explosive agents, critical infrastructure and areas with equipment that is incompatible with metallic objects, such as magnetic resonance imaging machines. A sign shall be posted that conforms to Texas Penal Code, Section 30.06.

11. Counselors, staff and volunteers who work in a campus program for minors must, as a condition of their participation, agree not to carry a concealed handgun on the grounds or in buildings where the program is conducted. Parents of attendees must also agree, as a condition of their child’s participation, not to carry a concealed handgun on the grounds or in buildings where the program is conducted. “Campus program for minors” is defined as to provide oversight and training for camps and programs involving minors held on College premises or operated by the College which have recreational, athletic, religious or educational activities for the campers. This includes all camps or programs covered by Texas Education Code, Chapter 51, Section 51.976, as well as any day camp, activity or University Interscholastic League (“UIL”) event sponsored by the College. A sign shall be posted that conforms to Texas Penal Code, Section 30.06.

This policy does not apply to College course-based academic service learning or research approved by the Institutional Review Board (“IRB”).

12. The College shall amend the Code of Student Conduct, Faculty Handbook and San Jacinto Policy and Procedure Manual to provide that causing the accidental or intentional showing of a firearm or the accidental discharge of a firearm is conduct subject to disciplinary action.

13. Exclusion zones created by Texas Penal Code §§46.03 and 46.035 as well as by the rules and regulations enacted under S.B. 11 may sometimes comprise only a portion of a building. In some instances it may not be feasible to exclude concealed handguns only from the designated exclusion zones. The following factors and principles shall govern the implementation of these rules and regulations in those buildings in which some, but not all parts are designated as exclusion zones.

Governing factors:

- The percentage of assignable space or rooms in a building that are designated as exclusion zones
- The extent to which the area (or areas) designated as exclusion zones are segregated from other areas of the building
- The extent to which use of the building and hence its status as an exclusion zone, varies from day-to-day or week-to-week

Governing principles:
17. To the extent possible, areas within gun-exclusion zones should be made available on a scheduled basis to faculty and staff. These spaces can be used for conferences that faculty or staff would prefer to conduct in a gun-exclusion zone.

18. The following factors and principles shall govern the implementation of exclusions or allowances for Graduation ceremonies.

**Governing factors:**

- Off-campus location shall follow the venue’s rules and regulations in regards to the permissible carrying of firearms.
- On-campus location shall follow the use of the building and/or exclusion zone criteria set forth herein.

19. The Campus Safety and Security Council, appointed by the Chancellor, shall be established and tasked, at a minimum, with the following responsibilities:

- Support the consistent implementation of these policies;
- Provide a review process for recommendations to the Chancellor; and
- Compile, maintain and provide a periodic review of the premises where license holders are prohibited from carrying a handgun.

A student, or a member of the faculty or staff of the College may appeal a decision regarding the implementation of a policy or procedure contained herein to the Campus Safety and Security Council for consideration. A further appeal of the decision of the Campus Safety and Security Council may be submitted to the Vice Chancellor of Fiscal Affairs for consideration. The Vice Chancellor of Fiscal Affairs may choose to make a final decision or submit the appeal to the Chancellor for consideration. The Chancellor may approve, reject or modify the decision in question or may submit the issue to the Campus Safety and Security Council for reconsideration. The decision of the Chancellor to approve, reject or modify a decision is final.

Additional policies or exclusion areas not provided for in this policy will not be the subject of or considered as a matter of appeal. In accordance with Texas Government Code, Section 411.2031, the Chancellor is authorized to enact reasonable rules and regulations regarding the concealed carry of handguns on campus.

20. Not later than Sept. 1 of each even-numbered year, the College shall submit a report to the Texas Legislature and to the standing committees of the Legislature with jurisdiction over the implementation of these policies that:

- Describes the rules and regulations adopted by the College regarding the carrying of concealed handguns on its campuses; and
- Outlines the reasons the College established the provisions adopted.

**Campus Carry Facts and Helpful Hints**

Campus Carry took effect for San Jacinto College on Aug. 1, 2017.

- License to carry holders may carry a concealed handgun on campus.
- The handgun must remain concealed and within arm’s reach of the license to carry holder.
- Handguns may not be openly carried.
- Handguns may not be openly displayed at any time.
- No other prohibited weapons may be carried.
- Only members of the San Jacinto College Police Department may ask someone if they are licensed to carry a concealed handgun.
- San Jacinto College does not provide handgun storage.
- Handguns may be stored in a locked motor vehicle.
- There will be several areas of campus called gun exclusion zones where a license to carry holder may not enter with a concealed handgun.
- License to carry holders are responsible for knowing gun exclusion zone locations.

**What is a Gun Exclusion Zone?**

An area of campus, building, or room where the possession of a handgun is prohibited by current Texas statute; or an area of campus, building or room designated and approved by the SLT and Board of Trustees in which the possession of a handgun is prohibited.

**Gun exclusion zones will be clearly marked.**

**Where May a License to Carry Holder Carry a Concealed Handgun?**

Any area that is not designated as a gun exclusion zone. Examples:

- Public or private driveway
- Streets
- Sidewalk or walkway
- Parking lot, parking garage or other parking area
- Hallways
- Classrooms
- Offices open to the general public
- Financial Aid
- Nursing Labs
- Culinary Labs
- Gym/Wellness Centers

**If you see someone with a handgun on campus:**
Definitions

Campus: All land and buildings owned or leased by the San Jacinto Community College District

College: The San Jacinto Community College District

Concealed Carry: The Texas Department of Public Safety defines a concealed handgun as a handgun not openly discernable to the ordinary observation of a reasonable person.

Employee: A full-time or part-time employee of the San Jacinto Community College District as defined by Human Resources policy and procedure

Exclusion Zones: An area of campus, building or room where the possession of a handgun is prohibited by current Texas statute; or an area of campus, building or room designated and approved by the SLT and Board of Trustees in which the possession of a handgun is prohibited.

Handgun: A handgun is any firearm that is designed, made or adapted to be fired with one hand.

License to Carry Holder: A person licensed to carry a concealed handgun under Chapter 411 of the Texas Government Code

“On or about their person”: Means a person licensed to carry a handgun must carry a handgun in a manner that the handgun is close enough to the license holder that he or she can reach it without materially changing position

Patient-Care Areas: An area, including research areas, that involves the treatment or evaluation of a medical or mental health condition of a patient by a licensed health care provider or under the supervision or direction of a licensed health care provider and that results in a formal record of treatment

Student: A currently enrolled student of the San Jacinto Community College District as defined by instruction policy and procedure

How to Request Public Information

How To Request Public Information

While there is no strict form required to request public information, there are certain guidelines that must be met.

1. Your request must be in writing. Only written requests trigger the College’s obligation under the Public Information Act.
2. Your request should be for documents or other information that is already in existence. The College is not required to answer questions, perform legal research or comply with a continuing request to supply future information. The College is not required to create a document, report or other information not in existence under the Public Information Act.
3. Requests should be addressed to the College Public Information Officer. Requests made by facsimile or electronic mail must be addressed to the Public Information Officer in order to trigger an obligation under the Public Information Act.

Contact Information for the San Jacinto College Public Information Officer

Teri Crawford
Vice Chancellor for Marketing, Public Relations and Government Affairs
4624 Fairmont Parkway, Suite 210
Pasadena, Texas 77504
Teri.Crawford@sjcd.edu

Change of Name or Address

The College expects students who change their names, residences, email or mailing addresses to notify the Admissions or Educational Planning, Counseling & Completion offices immediately. The College considers any communication sent to the name and address given by a student on College records to be properly delivered.

Registration

Web Registration-Secure Online System (SOS)

The online registration system is Secure Online System (SOS). Once students have been admitted, they may access SOS.

Web registration is available at www.sanjac.edu/soslogin.

Students may access web registration if they have completed orientation, submitted meningitis vaccination documentation or are exempt from the requirement and have been admitted/re-admitted, or continuing students may access web registration. Dual credit students will need to see the dual credit officer or their high school counselor for registration.

The following steps will give students access to the Secure Online System (SOS):

1. Visit the San Jacinto College website at www.sanjac.edu/sos-login, then click the blue SOS Login box in the middle of the page.
2. To login, enter your generated ID number, which is a capital G with the assigned eight digit number.
3. Enter the six-digit PIN that was provided when you claimed your account.
4. Select My Registration and follow the system prompts.
5. Select the term in which you want to enroll. There are multiple terms available.
6. Select Step 5, register for classes. You may search by subject, campus and class times, or you may simply enter the CRN numbers for desired classes.
7. Select Submit Changes to save the requested classes or to determine if there are registration restrictions. When the schedule is correct, select the View My Schedule link at the bottom of the page to have the system calculate the tuition and fees due. Submitting changes will add charges if classes have started.
8. Select View Fee Assessment, and then select Student Account Suite button. Refer to the Registration and Payment Schedule for payment deadlines.
9. Be sure to print your schedule and/or payment confirmation before you exit SOS, and carefully check that it is correct. Late changes result in additional charges. Students who change their minds about
Course Finder

Course Finder is an online tool to help students build a possible schedule. If students use it to look up information, they must remember to login to SOS to register for classes.

Schedule Disclaimer

The College will determine the times and locations of classes as well as the minimum and maximum enrollment per class. The College reserves the right to cancel classes, change instructors and otherwise alter the schedule. There is no charge for schedule changes due to canceled classes. To replace a canceled class, the student should make changes during the time designated in the Schedule of Classes.

Course Load

The second digit of the course number indicates the credit hours associated with that course. The maximum course load during 16 weeks is 18 hours. Only with the approval of the instructional dean, students may enroll in additional term hours of credit. The maximum course load permitted during the summer term is 14 term hours or seven term hours per summer five-week part of term. The maximum load in a three-week mini session is three term hours.

Students achieve full-time status when they enroll for 12 or more term hours in a full term or summer session. A useful guideline is that students should spend at least two hours studying for every hour they spend in the classroom. For example, a student taking 15 term hours assumes the responsibility for a minimum of 45 hours per week, 15 hours in class and 30 hours studying. Working students should consider the number of term hours they take in relation to the number of hours they work per week.

Enrolling at Multiple Campuses

Students are encouraged to take classes at any of the campuses of the College district. Students wanting to take courses at multiple campuses must calculate the time needed to drive, consider traffic conditions, time needed to park and walk to class between one campus and another prior to scheduling classes. The allotted time between classes is 10 minutes. The estimated minimum travel time between campuses is as follows:

- Central to South - 35 minutes
- Central to North - 50 minutes
- North to South - One hour and five minutes

This means that usually one class period must be left unscheduled to allow enough time to safely travel from one campus to the next. The number of times a student can be tardy to class calculates into the excessive absences maximum and could cause students to receive a failing grade in a class. Additionally, late students are disruptive to the teaching and learning environment for all.

Parts of Term

The terms include a traditional “full” term of 16 weeks (fall and spring) or 10 weeks (summer) as well as multiple shorter “parts-of-term” which are provided to enable students to enroll in courses throughout the year. For example, the spring term includes a 16-week session, a 15-week “weekend” session, two overlapping 12-week sessions, two eight-week sessions, a 6-week/10-week combination and four 4-week sessions. The various parts of term provide significant flexibility for scheduling and increase the opportunities for enrolling at times other than the start of the full term. Following the start of the term, the online system is open for adding classes in those parts of term that have not yet started.

University Transfer

Students planning to transfer to a 4-year college or university should select courses according to the curriculum requirements of the institution they plan to attend. Transfer MAPS for some universities are located on the website and in My San Jac GPS. Students should contact a college educational planner/counselor for help in selecting courses if the university they are interested in transferring to is not listed.

Students not planning to transfer may select courses according to associate degree or certificate requirements.

Concurrent Enrollment

The total number of term hours taken by a student concurrently enrolled at San Jacinto College and another college or university may not exceed that allowed by College regulations (See Course Load.)

Prerequisites or Co-requisites

Some course descriptions stipulate that students must earn credit for certain course prerequisites before they can register for that course. Prerequisites help assure that students have sufficient background in the subject to succeed in the course.

A co-requisite is a notation in a course description indicating that a student who enrolls in the course must also enroll concurrently in the listed co-requisite course unless that course has already been completed with a passing grade.

Minimum placement test scores in reading, writing and/or mathematics skills are prerequisites for most classes academic and college preparatory courses. These prerequisites constitute a condition of enrollment in these courses for all students and cannot be waived. Course descriptions in the Catalog will indicate which courses have such prerequisites.
Under special circumstances the department may allow a student to register for a course without the required prerequisite or co-requisite. A waiver of the required prerequisite or co-requisite does not affect degree requirements. Students who have been granted a waiver may earn needed credit through course substitution or credit by examination. Although students may receive credit toward graduation at San Jacinto College, if prerequisites are waived for certain courses, another college may not allow credit for such courses. If students do not follow prerequisite/co-requisite requirements, the College may withdraw them from the course.

Repetition of Courses
If a student repeats a course for which credit has previously been received, the higher grade is the grade of record. Neither the hours nor the grade points associated with the lower grade will be used in transcript grade point average (GPA) calculations; however, the lower grade will remain on the student’s transcript permanently and will be included in calculations of financial aid eligibility.

A few courses may be repeated for credit. These exceptions are noted in the course descriptions found in this catalog. Students planning to transfer should check with the receiving institution concerning policy for enrollment services and GPA calculations for repeated courses. Students may be charged a higher tuition rate when registering for the same course three or more times. See Tuition and Fees section for more information.

Schedule Changes and Dropping Courses
Students may change their schedules by dropping and/or adding course sections only during designated periods. A student may drop a course or withdraw from all courses within the published time period during the term. There is no additional charge for course changes prior to the first day of the term or part of term. The student should initiate the drop online. The refund schedule lists drop deadline dates and refund percentages, www.sanjac.edu/refunds. Students enrolled in college preparatory courses must drop courses in person. If the student is unable to drop online or in person, he/she must contact the College at 281-998-6150 for assistance.

Simply informing the instructor of the intent to drop is not sufficient. The student is responsible for dropping officially from a course. A student may not drop/withdraw after the last published drop date. After the deadline the College does not permit withdrawal and students will receive a grade of A, B, C, D, F, or FX. Students may not attend any class from which they have dropped.

Students who make class changes online should print and retain verification of their schedule changes in case questions arise later about refunds or transcript records.

Class Change Fees
Students can make changes to their class schedule without a fee prior to the published start date of the term/part of term. Students changing classes or sections resulting in dropping classes or sections on or after the start date will be assessed charges in accordance with the state refund schedule.

Late Registration
San Jacinto College maintains a No Late Registration Policy. Registration is available until the day before the first day of class. The Admissions Office and Educational Planning, Counseling & Completion can assist students with enrollment before the class starts. Registration dates and refund schedules can be found at www.sanjac.edu/refunds.

Complete Withdrawal from College or Dropping All Courses
Dropping all courses for the term at the same time constitutes the intent to officially withdraw from the College. Additionally, when students officially withdraw or do not withdraw from the College but drop individual courses, when the last course is dropped, the College requires that the student return all College-owned property and pay all outstanding debts of tuition, fees and fines. San Jacinto College does not issue official transcripts for students who have outstanding debts or unreturned College property.

Six-Drop Limit Provisions (TEC 51.907)
Students who enrolled as entering freshmen or first-time-in-college (FTIC) students during the fall 2007 and thereafter, are subject to the provisions of the six-drop limit. This limits the total number of drops of an affected student to six. These six include all drops from all Texas public colleges or universities. The drops a student has at San Jacinto College that are within the six-drop limit will be identified with a grade of WL. An affected student may only have six grades the equivalent of WL from all Texas public colleges and universities attended. The number of drops included in the limit from transfer institutions will be indicated on the transcript sent to San Jacinto College. After the student has received six grades the equivalent of WL in total, the student will not be allowed to drop any additional courses and must receive grades of A, B, C, D, F or FX in the courses.

Students who remain enrolled in the course on or after the official census date of the course will be awarded a grade on the transcript. Courses dropped prior to the census date for that course will not count in the six-drop limit since courses dropped prior to the census date are not awarded a grade of W or WL. The official census date varies according to the length of the course.

San Jacinto College will consider the following situations as constituting an approved blanket exemption from the six-drop limit for affected students:

1. Grades of W in all college preparatory courses or any courses with a 0 in the first digit of the course number.
2. All grades of W received for all courses taken by dual credit/early admission students received prior to high school graduation even if taken after fall 2007.
3. All grades of W are received when the student’s intent was to “withdraw” from the institution. To meet the requirement for “withdrawing from the institution” the student must drop all courses for all parts of term on the same date. This applies to drops after the official census date. The term is viewed in totality and not by part of term. The student must inform the Educational Planning, Counseling & Completion Office of their intent to withdraw.

San Jacinto College will notify by email all new first-time-in-college students each term that they are affected by SB 1231 and that they will be limited to six course drops during their enrollment at all public colleges and universities in Texas. Students affected by the six-drop limit may view the total number of drops accumulated at San Jacinto College and transfer institutions through their SOS accounts.
There are provisions for appeal of grades of WL awarded at San Jacinto College that are included in the six-drop limit. For more information, go to www.sanjac.edu/six-drop. Grades included in the six-drop limit from transfer institutions must be appealed to the transfer institution.

**Auditing a Course**

Approval to audit a credit course may be granted to individuals who complete the audit application with the Admissions Office.

- Auditors (including senior citizens) must enroll for the course after the first class meeting during the official registration period, but before the second class meeting.
- Not all courses are available for audit. Courses that have met the maximum occupancy cannot be audited. CPD classes are not available for audit.
- Students must meet all prerequisite and skill level requirements for the course being audited.
- Financial aid does not cover the cost to audit a course.
- Students must purchase the required materials, including books, for the course.
- Audit students will have access to all buildings, services and technology, including Blackboard and SOS.
- Audit students must obtain a student ID from the Admissions Office and a parking permit from the Business Office.
- Audited course work will be posted on the transcript with a grade of AUDIT.
- Audit students are required to conform to the same conduct in the classroom and on campus as credit students and must comply with the policies, rules, regulations and generally accepted practices of the College (See San Jacinto College Handbook and Code of Student Conduct.)
- Audit students must pay the same time they register, either in full or by enrolling in a payment plan, if available, at a campus business office. Tuition is based on residency status. The general service fee will apply to all students as a one time fee per semester.
- Refunds for dropping an audited course will follow the same schedule as the regular refund schedule. Please see Admissions Office for assistance in dropping an audit class.
- Senior citizens 65 and older may audit a credit course without paying up to six (6) credit hours of tuition, but they must pay all applicable fees including the general service and related lab fees or incidental fees.

**Senior Citizens Enrolling in Classes**

Under Texas Law (Section 54.210), a college may allow senior citizens 65 years of age or older (by the first day of classes of the specific enrollment term) to enroll in up to six credit hours per term without paying tuition, providing there is space available and the applicant has not exceeded 90 previous college credit hours. The senior citizen must pay all applicable fees, including the general service and related lab fees or incidental fees.

**Services and Activities**

**College Libraries**

Each San Jacinto College library provides a broad range of academic support services that include:

- Current print materials including books, magazines and newspapers
- Electronic databases with access to more than 19,000 full-text journals
- Thousands of electronic books
- Instructional videos

Professional librarians are available in person and online to show you how to use the library and to help you locate information. Email reference inquiries may be submitted through the library's page on the San Jacinto College website.

Students can access the library catalog and research databases from home or work through the San Jacinto College website. In the library catalog, students can place holds on books, renew books and check personal library records. Students can also access library resources through Blackboard.

Textbooks, supplemental readings and videos placed on reserve can be obtained at the reserve desk of the campus where the class is being taught. These items may be used inside the library. Copiers and scanners are also available at each library.

Most books are loaned for three weeks. Students may renew your books once if no one else has placed a hold on the item(s).

The libraries have laptop and desktop computers that provide students with access to the Internet, Microsoft Office software and other applications. Students who have their own laptops are welcome to use the wireless network available at each library.

Students may request a TexShare card which provides access to materials from participating public and academic libraries across the state. Our interlibrary loan service may be used to borrow books or obtain articles not owned by any of the SJC libraries.

**Note:** Late fees for past due items vary from $.50 to $1 per day. Students are billed full replacement costs plus late fees for lost or damaged materials.

**Student Success Centers**

The Student Success Centers on each campus offer free tutoring services to all students. Our student tutors are certified by the College Reading and Learning Association and come highly recommended by their instructors. Located in the libraries, the Centers offer the following services:

- One-on-one tutoring
- Group tutoring
- Help with a wide range of subjects, including math, English, chemistry, biology, physics, geology, history, BCIS and accounting
- Review sessions and TSI Assessment Prep sessions
- Resources for checkout
- Access to study rooms, computers and calculators
- Help with studying and test-taking skills

**Computer Access**

Students have access to computers via the Interactive Learning Centers (ILC) and computer labs located throughout the campuses. The labs are equipped with personal computers and printers. Students are assigned an account to access a local area network that provides tutorial software as well as software for creating assignments, reports, accounting spreadsheets, statistical analysis and computer programs. The ILC offers
access to the Internet, Microsoft Office, Blackboard and other College-supported applications with onsite lab support available. Lab hours are posted at the beginning of each semester.

**Child Care**

North and Central campuses operate a Child Development /Early Childhood Education Lab School licensed by the Texas Department of Family and Protective Services, a division of Texas Health and Human Services Commission and accredited by the National Association for the Education of Young Children. Children are enrolled in the Lab School on a first-come basis, as space is available, for one term or session at a time. Grants may be available for child care assistance.

**Child Care Assistance**

San Jacinto College works with Workforce Solutions to provide child care assistance. Students and employees are encouraged to visit the nearest San Jacinto College Financial Aid Office to complete an application.

**Textbook Repurchase Policy**

San Jacinto College bookstores, located on all three campuses, are providers for all required textbooks, course materials and school supplies. With the largest selection of used books and digital titles (as available), the bookstores stock every book for every course offered at San Jacinto College. Textbooks (when applicable) also can be rented for an entire semester at significant savings, sometimes more than half the price of a new textbook.

Textbooks purchased at the beginning of the term may be returned for 100 percent refund, subject to the following conditions:

- A full refund will be given in your original form of payment if textbooks are returned during the first week of classes with original receipt.
- With proof of a schedule change and original receipt, a full refund will be given in your original form of payment during the first 30 days of classes.
- No refunds on unwrapped loose-leaf books or shrink-wrapped titles which do not have the wrapping intact.
- No refunds on Digital Content once accessed.
- Textbooks must be in original condition.
- No refunds or exchanges without original receipt.

Bookstores will buy back textbooks at the end of each term. Bookstore decisions about whether to buy back any textbook are determined by the need for that book in the next term. Cash register receipts are not required to sell books back to the bookstores, but a valid student ID is required. Contact the bookstore for specific buyback dates.

Central Campus 281-476-1898
North Campus 281-459-7111
South Campus 281-922-3410

**Commuter Campus**

San Jacinto College is a commuter college, so dormitories are not located on College campuses. A variety of apartments are located within close proximity to the College campuses.

**Student Services**

San Jacinto College provides a comprehensive network of support services to create a supportive, stimulating academic environment that extends beyond the classroom. Student Services staff help students achieve their educational and career goals by providing knowledgeable assistance about various educational options including advising, financial aid and student engagement opportunities for leadership, personal enrichment and recreation.

**Campus Activities**

Our goal at the Office of Student Engagement and Activities is to promote success inside and outside of the classroom by enhancing the student experience. College isn’t just about learning on the inside of the classroom. We strive to create an environment where students feel connected to their alma mater by offering programs to open doors to student leadership, social opportunities, volunteering in the local community and enhancing academic success.

San Jacinto College believes that students acquire many of their most lasting impressions in college in co-curricular and extracurricular activities. The College provides a variety of campus activities to meet the interests and needs of all students. These campus activities enrich the college experience through a wide variety of social, cultural, intellectual and recreational programs that complement the students’ classroom experiences.

The Office of Student Engagement and Activities has information on over 100 student organizations across the campuses, festivals, activities, lecture series, community service projects and leadership development programs. Student organizations are a major component of the Student Engagement and Activities program. Belonging to a professional, social, cultural or special interest group on campus allows a student to acquire new interests, develop leadership and management skills and meet new people. Participating in extracurricular programs can make a difference in the transition from college to career. Many employers see campus involvement as a key indicator of a student’s potential for success with his/her company. Therefore, students are encouraged to participate in campus activities for both personal and professional enrichment.

**Recreational and Intramural Sports**

The San Jacinto College campus recreation department provides students opportunities to enjoy a variety of sports such as volleyball, basketball, indoor soccer, pool, table tennis and more. All eligible students are welcome to participate in the program’s individual, dual or team sports. Most activities are free for eligible students. For more information, contact the campus Rec Sports department.

**Services for Students with Disabilities**

San Jacinto College does not discriminate on the basis of disabilities in admission or access to its educational programs. The College complies with Section 504 of the Rehabilitation Act of 1972 and the Americans with Disabilities Act. Students with disabilities may be eligible for certain accommodations such as additional testing time, registration assistance or interpreting services. The College’s Accessibility Services office assists students who may need accommodations. Students wishing to apply for accommodations should go to www.sanjac.edu/accessibility to complete the online application. Inquiries about accessibility services may be addressed to accessibility.services@sjcd.edu or by visiting the Educational Planning, Counseling & Completion office on your campus.

Central Campus: 281-478-2768
North Campus: 281-459-7112
South Campus: 281-922-3444
Any student with a question or concern about discrimination or harassment based on disability may file a complaint in accordance with Procedure 300 in the Student Handbook. Individuals who wish to file a complaint may obtain information about the complaint process at www.sanjac.edu/complaint-process.

Students with disabilities have the right to appeal accommodation decisions made through Educational Planning, Counseling & Completion. To appeal, an individual first will need to complete the Accessibility Services Accommodation Application.

Individuals wanting to appeal the decision must do so in writing within 14 days of the notice of the accommodation decision. The appeal should include a copy of the original request for accommodation, documentation of disability, the accommodation decision and the reasons why the decision is being appealed. The appeal is to be sent to the Director of Educational Planning, Counseling & Completion (on your respective campus) who, after a review, will render a written decision, typically within two weeks or less.

**For inquiries, you can call:**
- **Central Campus:** 281-478-2768
- **North Campus:** 281-459-7192
- **South Campus:** 281-922-3444

The Director of Educational Planning, Counseling & Completion (EPCC) will provide students an opportunity to present information useful to understanding the appeal. The Director of EPCC may decide to uphold the previous accommodation decision, support the appeal request, decide on an alternative or decide that new information has been submitted which necessitates further review.

**Equity and Accommodation**
San Jacinto College is dedicated to providing the least restrictive learning environment for all students. The College promotes equity in academic access through reasonable accommodations as required by the Vocational Rehabilitation Act of 1973, Title V, Section 504 and the Americans with Disabilities Act of 1990 (ADA), which allow students with disabilities access to all post-secondary educational programs and activities.

**Career Services**
The purpose of Career Services is to be the leader in continuously fostering partnerships with students, alumni, employers, faculty, staff, administrators and the greater community. We support student success by providing students and alumni with the tools necessary to bridge education with employment while promoting lifelong career development.

San Jacinto College is committed to students’ complete success and that means helping them take the next step beyond the course work and into the working world. That’s where Career Services can help.

Career Services offers a variety of services to assist with career exploration, decision making and job search. We provide career assessments for students who are unsure about a major. Web-based tools to assist with career exploration gives students the opportunity to explore their personality, interests, and values which are important factors in choosing a career. An online database is available to search for full-time, part-time, on-campus and seasonal employment. Throughout the year, workshops on résumé writing and interviewing are offered, as well as career fairs, networking events and employer panels.

Undergrads, alumni, continuing education students and community members are invited to take advantage of our free services.

For more information or how to contact a Career Services, please visit www.sanjac.edu/career-center.

**Official Communications**
The College considers the following as official notifications:
Communications to the entire student body properly delivered through San Jacinto College email, text message, voicemail and/or posted on the official San Jacinto College website, Blackboard, campus bulletin boards or published in the Catalog, Student Handbook or the school newspaper.

Email service is provided to all San Jacinto College students. This account will be used by the College as the primary mail account for student communications and is tied to Blackboard courses for communications with faculty and other students. An email address will automatically be generated for a student who has registered and paid for a class at the College. This email service is for student use only. Features of the service are available at www.sanjac.edu/email.

**Emergency Closings**
In the event the College needs to be closed for any situation, such as inclement weather, students and employees should check the College website at www.sanjac.edu or call (888) 845-5288 for the most immediate and current information. The College will also engage SJC AlertMe which sends a voicemail, email and/or text message to each student/employee who opts in. Students are responsible for any charges from their phone service provider associated with receiving voice or text messages. Official communications with students is through their San Jacinto College email account and any emergency notifications will always be sent to students’ San Jacinto College email addresses. The College will also contact local media, but the most reliable, accurate and current information will also be found on the College website, via SJC AlertMe or at the toll-free number listed above.

**Student Email Account**
Email service is provided to all San Jacinto College students. This account will be used by the College as the primary email account for student communications and is tied to Blackboard courses for communications with faculty and other students. An email address will automatically be generated for a student who has registered and paid for a class at the College. This email service is for student use only. Features of the service are available at www.sanjac.edu/email.

**Educational Planning, Counseling and Completion**
Educational Planning, Counseling and Completion provides comprehensive services to help students with educational planning, career and personal development and short-term personal counseling.

The purpose of Educational Planning is to create a collaborative learning experience that empowers students to maximize their potential while completing their educational goals. This process involves a series of ongoing and intentional conversations between the student and an educational planner that establish a pathway to student success and the realization of educational, career and life goals.
Professional counselors are available to help students understand how their skills, values and interests can assist them in identifying a career path.

Short-term personal counseling is available to assist students in dealing with personal issues such as transition to college, study skills, family issues and referrals to social services in the community.

For more information, please visit www.sanjac.edu/educational-planning.

Student Grades and Records

Classification
A freshman is a student who has accumulated fewer than 30 term hours of college credit. A sophomore is a student who has accumulated 30 or more hours of college credit.

Grade Range
Percentage grades, when used, are converted to these letter grades:

<table>
<thead>
<tr>
<th>Range</th>
<th>Grade</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>90–100</td>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>80–89</td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>70–79</td>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>60–69</td>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>Below 60</td>
<td>F, FX</td>
<td>0</td>
</tr>
</tbody>
</table>

Grade Point Average (GPA)
Earned grade points are calculated by multiplying the number of credit hours of the course by the grade point value of the grade received in the course. For example, in a three-term hour course, an A produces twelve grade points; a B produces nine grade points; a C, six grade points; a D, three grade points; and an F or FX, zero grade points.

The grade point average is computed by dividing the total grade points earned by the total number of term hours completed in unduplicated courses with grades of A, B, C, D, F or FX. Grade point average computations include only courses completed at San Jacinto College. For repeated courses only the highest grade is used in computing the cumulative grade point average. Grades of I, N, W and WL are neutral and are not included in any grade point average.

Overall Institution Grade Point Average
The College has established 2.0 as the minimum grade point average requirement for a student to remain in good academic standing. (See the Academic Status section.) The transcript Grade Point Average (GPA) is calculated on the basis of all credit posted to the San Jacinto College transcript, including credit hours in college preparatory courses. If a student repeats a course which may not be repeated for credit, only the highest grade earned in the course is used in determining the GPA.

Scholarly Achievement Eligibility for Honors and Awards Received
At the end of each long term, a Dean's Honor List is compiled. In order to be listed, a student must have earned a grade point average of at least 3.5 as a full-time student (12 or more hours completed during the term). The Dean's Honor List is recorded on the official transcript each term the student qualifies.

Phi Theta Kappa (PTK)
Another recognition is Phi Theta Kappa (PTK). To be eligible for membership into Phi Theta Kappa, a student must have completed at least 12 hours that may be applied to an associate degree, have a 3.5 grade point average, receive an invitation for membership from the chapter at San Jacinto College and must adhere to the moral standards of the society.

National Technical Honor Society (NTHS)
Students in technical programs have an opportunity to join the National Technical Honor Society (NTHS). To be eligible for membership, a student must have a 3.5 grade point average on all technical courses, a recommendation from an instructor and have completed 3-5 hours of community service.

Honors Program
The Honors program is another opportunity to enrich a student's college experience. Students with a 3.25+ cumulative GPA on at least 12 hours of college credit courses or first-time-in-college students with one of the following are eligible for the Honors program: a 3.25+ GPA; score of 4 or 5 on an AP exam; top 20% of high school class; 1100 SAT (reading + math); or 26 ACT. Documentation, such as official transcripts, must be provided with the Honors program application.

Graduates with a 4.0 Grade Point Average
Students who have applied for graduation for a particular graduation period will be reviewed for grade point average and those with a 4.0 will be identified in the commencement program. The information may be published in other SJCD media and shared with other media entities.

Final Examinations
The Provosts establish the times and dates of final examinations. Professors must follow those published schedules and students may not take final examinations earlier than the times designated in the published schedules.

Grading System
Term grades for all students are entered electronically by the faculty at the end of the term. Once the grades have all been entered, GPAs and academic standings are re-calculated and posted to the academic record as quickly as possible. Students can view or print their grades online through the Secure Online System (SOS).

The College uses these grades to evaluate students' academic performance.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Grade Points per Credit Hour Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent, superior achievement</td>
<td>4 grade points</td>
</tr>
<tr>
<td>B</td>
<td>Good, above average achievement</td>
<td>3 grade points</td>
</tr>
<tr>
<td>C</td>
<td>Average, acceptable achievement</td>
<td>2 grade points</td>
</tr>
<tr>
<td>D</td>
<td>Passing, marginal achievement</td>
<td>1 grade point</td>
</tr>
<tr>
<td>F</td>
<td>Failure, unsatisfactory achievement</td>
<td>0 grade points</td>
</tr>
</tbody>
</table>
Instructor keep an accurate record of each student’s attendance and do not allow students who do not attend regularly to slow the pace of the class. However, instructors may provide an opportunity for a student who presents a reasonable excuse for an absence to make up missed work. A student who does not offer a satisfactory explanation for an absence will have that absence classified as unexcused and earn an F for any test, assignment or laboratory work given or due during that absence. The student will not be allowed to make up work that was missed.

Whenever a student’s absences reach 8.33 percent of the contact hours of the course for unexcused reasons or reasons unknown to the instructor, the instructor may request that the student drop the course (if applicable, see TEC 51.907 Six-Drop Limit Provisions section) and if not eligible to drop or the student chooses not to drop, the instructor may award a grade of FX at that time, which will prohibit the student from attending class.

For example, the number of contact hours in a fall or spring term course equals the number of weekly classroom and laboratory hours in the course description multiplied by 16. Therefore, professors may prohibit the students who accumulate four hours absence in classes meeting three hours per week or eight hours absence in classes meeting six hours per week from attending class. Three unexcused tardies count as one unexcused absence.

An instructor also has authority to request that the student drop the course and to prohibit a student from participating in class when the instructor believes the student has accumulated so many absences (including excused absences) that the student cannot reasonably expect to pass the course. An instructor may also award the temporary grade of W (Withdrawal) only under certain circumstances. (See the Incomplete (I) section under the Grading System section for specific information.)

Note: A student who wishes to withdraw from a course must withdraw officially online or through the Educational Planning, Counseling and Completion office; simply informing the instructor of the intent to withdraw is not sufficient. The Withdrawal from Courses section which follows gives more information.

Accreditation or certification standards that require more stringent attendance policies may govern certain departments or programs.

College regulations specify that only students who have registered for the class and who are listed on the official class rolls may attend a class. Students not listed on official class rolls may not attend classes; nor may students who have withdrawn or who have been withdrawn attend classes.

Procedure for Student to Appeal a Final Grade

Grade determination and awarding of a final grade in a course is clearly the responsibility of the instructor. Final grade reports should be available to the student within a reasonable time following the end of the course.

When a student becomes aware of a final grade that is believed to be incorrect, the student may appeal the final grade received in the course. The student shall initiate the appeal process as soon as possible following the receipt of the grade. The appeal process shall be filed no
If a student meets the above conditions, but does not receive transfer
credit for one or more courses from the receiving institution, the student
must notify in writing the Provost at his/her campus within 14 calendar
days of the notice of transfer credit denial. The Provost will initiate the
Transfer Dispute Resolution process established by the Texas Higher
Education Coordinating Board. If this process does not resolve the course
denial, San Jacinto College will develop a plan whereby the student
may take, tuition free, a maximum of nine credit hours of acceptable
alternative courses within one year from the date the plan was executed.
Although tuition for these courses is free, the student must pay for books,
fees or other course-related expenses.

Entry-Level Job Skills
Subject to the special conditions listed below, San Jacinto College
 guarantees that students earning an associate of applied science degree
or certificate of technology will have the job skills necessary for entry-
level employment in the technical field for which they have been trained.
If the employer provides sufficient evidence that the student lacks these
skills after completing one of these programs, the College will provide
additional skill training, tuition free. These special conditions apply to the
guarantee:

1. The student must earn the associate of applied science degree or
the certificate of technology in a technical program listed in the San
Jacinto College Catalog as of the 1992-1993 academic year or later.
2. The student must complete the degree program within four years or
the certificate program within three years. All technical course work
must be completed at San Jacinto College within the specified time
period.
3. The student must be employed full time within 12 months after
graduation in an occupation directly related to the specific program
completed at San Jacinto College as certified by the College.
4. The student's employer must certify in writing that the student lacks
the entry-level job skills identified as program-exit competencies by
San Jacinto College for the program which he/she completed. The
employer must specify the areas of deficiency within 90 days of initial
employment.
5. After the student contacts in writing the San Jacinto College campus
where he/she received training, the student and the College will
develop together a written educational plan for retraining.
6. Retraining will be limited to nine credit hours related to the identified
skill deficiency and to those classes regularly scheduled during the
period covered by the retraining plan.
7. The students must complete all retraining within a calendar year from
the time the educational plan is agreed upon.
8. Although tuition for this retraining is free, the student must pay for
books, insurance, uniforms, fees and other course-related expenses.
9. The guarantee does not imply that San Jacinto College graduates will
pass any licensing or qualifying examination for a particular career.
10. This guarantee does not apply to competencies taught in courses in
which the student earned a grade of less than C, nor does it apply to
courses which have been substituted for required courses specified in
the degree or certificate program.

Academic Status
A student's academic status is calculated each term (fall, spring and
summer) based upon previous academic status, term grade point average
(GPA) and cumulative grade point average. All credit courses taken at
San Jacinto College including college preparatory courses are included in
the calculation except that only the highest grades achieved in repeated
courses are counted. No course work from other institutions is included in the San Jacinto College GPA.

### Academic Suspension Period

Suspended students must sit out one long term (fall, spring or the entire summer session). After the student has sat out the suspension period, he or she must request re-admission and obtain advising with Educational Planning, Counseling & Completion before being eligible to enroll again. Students placed on academic suspension will be notified by mail or email that they have been suspended. Students may appeal their suspension as described below when extenuating circumstances exist.

### Suspension Appeals

San Jacinto College students on academic suspension who have not completed their term of suspension may appeal for immediate reinstatement when truly extenuating circumstances exist. Request for Appeal of Suspension forms are available in the Educational Planning, Counseling & Completion office on each campus. If the Appeals Committee approves the request, the Committee will prescribe specific conditions for enrollment. These conditions may include limits on classes or the number of hours which may be taken, specific grades which must be attained (e.g., C or above; student may not withdraw), requirements for periodic progress reports from the teacher(s) involved and mandatory follow-up counseling. Students who agree to the conditions of enrollment as defined by the Committee will be allowed to re-enroll on suspension override. Failure to meet the terms of the contract will result in immediate execution of the suspension stipulations with no refund of tuition and fees and without further appeal. If the Committee on one campus denies the suspension appeal, the denial is effective on all three San Jacinto College campuses.

### Re-enrollment After Suspension

Once the term of suspension has elapsed, students may apply for readmission. The academic status of suspension will prevent registration until mandatory advising has been completed with Educational Planning, Counseling & Completion. Students enrolling after their suspension period on academic probation, who achieve an overall institution GPA of 2.0 or greater, will be considered in Good Standing. Students who achieve a term GPA of 2.0 or better but who do not raise their overall institution GPA of 2.0 or better will continue on academic probation.

### Transfer Students on Suspension

Students admitted from other institutions on academic suspension will be treated the same as students from San Jacinto College on suspension as described above. Students who fail to report a transfer academic status of suspension to gain admission may be immediately withdrawn without any refund of tuition and fees paid.

**Note:** Please see the Academic Probation and Suspension Table for more information.

### Student Inquiries

Inquiries about student grades and records should be addressed to Educational Planning, Counseling & Completion at 281-998-6150.

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### Unattended Children on Campus

San Jacinto College occasionally offers classes and activities for children. At all other times children may not remain unattended on campus, nor may children attend classes with their parents.

### Retention of Student Work

The College may indefinitely retain all work submitted to a professor in a course including, but not limited to, tests, term papers, reports and projects.

### Student Intellectual Property

Students shall retain their intellectual property rights on projects produced as a result of their individual initiative with incidental use of College facilities and resources. If the student is working on a project initiated and funded by San Jacinto College, ownership resides with the College.

### Academic Probation and Suspension Table

Both the term and the institution GPA are based on the completion of grades A, B, C, D or F at San Jacinto College.

A student’s academic status is calculated at the end of each fall, spring and summer term (Summer I and Summer II are combined).
### Credit by Examination

Each college and university has its own policy for credit earned by examination and any such credit allowed by one institution may not necessarily be accepted at another. The following policies are in effect at San Jacinto College:

- A student must have earned at least three credit hours of course work at San Jacinto College before the College will post credit for College Level Evaluation Program (CLEP), Advanced Placement (AP), International Baccalaureate (IB) or internal examinations to the student's transcript.
- Credit for CLEP, AP, IB, internal examinations or a combination thereof may not exceed 30 credit hours.
- Credit will be awarded based on the Catalog in effect at the time the test was taken.
- A student who has previously received a grade (A, B, C, D, F, FX or I) in a course may not receive CLEP, AP, IB or internal examination credit for the same course.
- Grades and credit hours are assigned to credit earned by internal examinations; a minimum grade of C is required to earn credit. Term hours only are assigned to credit earned by CLEP, AP and IB examinations.
- Residence credit is not given for CLEP, AP, IB or internal examinations, and they are not included in GPA calculations.

### San Jacinto College:

San Jacinto College awards college credit for certain College Level Examination Program (CLEP) tests. Students should submit scores from completed tests to the admissions office for evaluation and posting of credit. Students taking one of the following CLEP exams and scoring 50 or better will be awarded the credit indicated in the chart below. For language exams, students must score 63 or better in order to receive credit for 2311/2312 courses.

San Jacinto College Central Campus, North Campus and South Campus have been designated as testing centers for CLEP examinations. Complete information about the CLEP program and credit by examination policies for San Jacinto College is available from the testing centers on all three campuses.

<table>
<thead>
<tr>
<th>CLEP Exam</th>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Composition</td>
<td>ENGL 1301</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>ENGL 2327 &amp;</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>ENGL 2328</td>
<td></td>
</tr>
<tr>
<td>English Literature</td>
<td>ENGL 2322 &amp;</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>ENGL 2323</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>MATH 1314</td>
<td>3</td>
</tr>
</tbody>
</table>
Chemistry CHEM 1311/ CHEM 1111 4
Calculus MATH 2413 4
French FREN 2311/FREN 2312 6
French FREN 1411/FREN 1412 8
German GERM 2311/ GERM 2312 6
German GERM 1411/ GERM 1412 8
Spanish SPAN 2311/SPAN 2312 8
Spanish SPAN 1411/SPAN 1412 8
American Government GOVT 2305 3
History of the US I: Early Colonization to 1877 HIST 1301 3
History of the US II: 1865 to Present HIST 1302 3
Principles of Macroeconomics ECON 2301 3
Principles of Microeconomics ECON 2302 3
Introductory Psychology PSYC 2301 3
Introductory Sociology SOCI 2301 3
Western Civilization I: Ancient Near East to 1648 HIST 2311 3
Western Civilization II: 1648 to Present HIST 2312 3
Financial Accounting ACCT 2301 3
Introductory Business Law BUSI 2301 3

**Advanced Placement Program (AP)**

San Jacinto College awards college credit for certain Advanced Placement (AP) program tests. Students should submit official scores from completed tests to the Educational Planning, Counseling & Completion office, who evaluates the scores and authorizes the posting of credit.

<table>
<thead>
<tr>
<th>AP Exam</th>
<th>Minimum Score</th>
<th>Hours of Credit</th>
<th>Course Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>3</td>
<td>3</td>
<td>ARTS 1303</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>4</td>
<td>BIOL 1306/ BIOL 1106</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>8</td>
<td>BIOL 1306/ BIOL 1106</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>3</td>
<td>4</td>
<td>MATH 2413</td>
</tr>
<tr>
<td>Calculus AB Subscore</td>
<td>3</td>
<td>4</td>
<td>MATH 2413</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>8</td>
<td>MATH 2413, MATH 2414</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td>4</td>
<td>CHEM 1311/ CHEM 1111</td>
</tr>
<tr>
<td>Chinese Language/Culture</td>
<td>3</td>
<td>8</td>
<td>CHIN 1411 and CHIN 1412</td>
</tr>
<tr>
<td>Computer Science A or AB</td>
<td>3</td>
<td>3</td>
<td>COSC 1336</td>
</tr>
<tr>
<td>Economics Macro</td>
<td>3</td>
<td>3</td>
<td>ECON 2301</td>
</tr>
<tr>
<td>Economics Micro</td>
<td>3</td>
<td>3</td>
<td>ECON 2302</td>
</tr>
<tr>
<td>English Language/Composition</td>
<td>3</td>
<td>3</td>
<td>ENGL 1301</td>
</tr>
<tr>
<td>English Literature/Composition</td>
<td>3</td>
<td>3</td>
<td>ENGL 1302</td>
</tr>
<tr>
<td>European History</td>
<td>3</td>
<td>3</td>
<td>HIST 2311</td>
</tr>
<tr>
<td>French Language</td>
<td>3</td>
<td>8</td>
<td>FREN 1411 and FREN 1412</td>
</tr>
<tr>
<td>French Literature</td>
<td>3</td>
<td>8</td>
<td>FREN 1411 and FREN 1412</td>
</tr>
<tr>
<td>German Language</td>
<td>3</td>
<td>8</td>
<td>GERM 1411 and GERM 1412</td>
</tr>
<tr>
<td>Government and Politics-US</td>
<td>3</td>
<td>3</td>
<td>GOVT 2305</td>
</tr>
<tr>
<td>History-US</td>
<td>3</td>
<td>3</td>
<td>HIST 1301</td>
</tr>
<tr>
<td>Human Geography</td>
<td>3</td>
<td>3</td>
<td>GEOG 1302</td>
</tr>
<tr>
<td>Music Theory (Aural Subscore)</td>
<td>3</td>
<td>2</td>
<td>MUSI 1216</td>
</tr>
<tr>
<td>Music Theory (Non-Aural Subscore)</td>
<td>3</td>
<td>2</td>
<td>MUSI 1211</td>
</tr>
<tr>
<td>Physics 1 (A)</td>
<td>3</td>
<td>4</td>
<td>PHYS 1301/ PHYS 1101</td>
</tr>
<tr>
<td>Physics 2 (B)</td>
<td>3</td>
<td>8</td>
<td>PHYS 1301/ PHYS 1101 and PHYS 1302/ PHYS 1102</td>
</tr>
<tr>
<td>Physics C- Electrical and Magnetic</td>
<td>3</td>
<td>4</td>
<td>PHYS 2326</td>
</tr>
<tr>
<td>Physics C- Mechanics</td>
<td>3</td>
<td>4</td>
<td>PHYS 2325 and PHYS 2125</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>3</td>
<td>PSYC 2301</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3</td>
<td>8</td>
<td>SPAN 1411 and SPAN 1412</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>3</td>
<td>8</td>
<td>SPAN 1411 and SPAN 1412</td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td>3</td>
<td>MATH 1342</td>
</tr>
<tr>
<td>Studio Art (2D Design)</td>
<td>3</td>
<td>3</td>
<td>ARTS 1311</td>
</tr>
<tr>
<td>Studio Art (3D Design)</td>
<td>3</td>
<td>3</td>
<td>ARTS 1312</td>
</tr>
</tbody>
</table>

San Jacinto College 2018-2019
San Jacinto College awards college credit for certain freshmen students who have completed International Baccalaureate (IB) Examinations with a score of 4 or above. In compliance with the Texas Higher Education Coordinating Board regulations, the College awards 24 semester hours or equivalent course credit in appropriate subject areas to those students who have completed the IB diploma program and who have achieved at least the minimum required score on each examination administered as part of the diploma program.

Students should submit scores from completed tests to the Admissions Office who evaluates the scores and authorizes the posting of credit. The current Texas Resident in-district tuition per credit hour fee is charged to record credit. Rules that apply to earning credit by any form of examination appear earlier in the Credit by Examination section of this catalog. Credit by IB examination may be earned in the following courses.

<table>
<thead>
<tr>
<th>IB Examination</th>
<th>Minimum Score Required</th>
<th>San Jacinto College Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language A1 or A2 or B HL</td>
<td>4</td>
<td>SPAN 1411, SPAN 1412, SPAN 2311, and SPAN 2312</td>
<td>4, 4, 3, 3</td>
</tr>
<tr>
<td>Language B SL</td>
<td>4</td>
<td>SPAN 1411 and SPAN 1412</td>
<td>4, 4</td>
</tr>
<tr>
<td>Language AB</td>
<td>4</td>
<td>SPAN 1411</td>
<td>4</td>
</tr>
<tr>
<td>Geography</td>
<td>4</td>
<td>GEOG 1301</td>
<td>3</td>
</tr>
<tr>
<td>History (European)</td>
<td>4</td>
<td>HIST 2311</td>
<td>3</td>
</tr>
<tr>
<td>Information Technology</td>
<td>4</td>
<td>BCIS 1305</td>
<td>3</td>
</tr>
<tr>
<td>Math HL</td>
<td>4</td>
<td>MATH 2412 and MATH 2413</td>
<td>4, 4</td>
</tr>
<tr>
<td>Math w/ further Math SL</td>
<td>4</td>
<td>MATH 1342</td>
<td>3</td>
</tr>
<tr>
<td>Math Methods SL</td>
<td>4</td>
<td>MATH 1324</td>
<td>3</td>
</tr>
<tr>
<td>Math Studies SL</td>
<td>4</td>
<td>MATH 1332</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>4</td>
<td>MUSI 1306</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy</td>
<td>4</td>
<td>PHIL 1301</td>
<td>3</td>
</tr>
<tr>
<td>Physics SL</td>
<td>4</td>
<td>PHYS 1301 and PHYS 1101</td>
<td>4</td>
</tr>
<tr>
<td>Physics HL</td>
<td>4</td>
<td>PHYS 1302 and PHYS 1102</td>
<td>4, 4</td>
</tr>
<tr>
<td>Psychology</td>
<td>4</td>
<td>PSYC 2301</td>
<td>3</td>
</tr>
<tr>
<td>Social Anthropology</td>
<td>4</td>
<td>ANTH 2346</td>
<td>3</td>
</tr>
<tr>
<td>Theater Arts</td>
<td>4</td>
<td>DRAM 1310</td>
<td>3</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>4</td>
<td>ARTS 1301</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit by Internal Exams

Internal challenge exams are developed by the technical programs, approved by SJCD curriculum teams and administered by the campus testing centers or academic departments. A student must petition the College to receive credit by departmental examination. Internal (departmental) challenge exams can only be attempted once. The instructional dean must approve the petition and designate a faculty member to administer the exam. Before taking the exam the student must pay the business office a nonrefundable $20 fee. The instructional dean evaluates the completed exam and authorizes the dean of Educational Planning, Counseling & Completion to authorize the posting of credit as appropriate. The credit will count for residency. The credit hours will count in hours used for financial aid decisions.
Students must provide documentation for Red Cross CPR Certification and First Aid Certification prior to taking the exam.

**CPL by Licensure or Industry Certification**

San Jacinto Community College District has established equivalent course credit for professional certificates and state or national licensure. Course credit is based on competencies demonstrated through successful completion of the professional certification, or Texas state or national licensure examinations. Students must provide evidence of an official, current Texas or national licensure or professional certificate to receive credit. Credit is generally awarded for introductory level courses only and will not be awarded for core curriculum or general education courses. At least 25% of the credit hours required for the degree must be earned through instruction at San Jacinto College. Credit by licensure does not apply to academic courses. A student must request to have the credit posted. The credit will not count as part of the residency requirement. The credit hours will count in hours used for financial aid decisions. To receive credit, students must:

- Provide evidence of successfully passing the professional certification exam and proof of current or active state of Texas licensure
- Verify licensure or certification provided has been approved for credit by the SJCD curriculum steering committee
- Provide an official copy of licensure or certification with the application

Before receiving credit, the student must pay the business office a nonrefundable $20 fee per course.

### Automotive Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUMT 1271 or AUMT 1272</td>
<td>Manufacturers Maintenance &amp; Pre-Delivery Automotive Maintenance and Repair</td>
<td>G1 ASE Certification</td>
</tr>
<tr>
<td>AUMT 1319</td>
<td>Automotive Engine Repair</td>
<td>Automotive Service Excellence (ASE) A1: Engine Repair</td>
</tr>
<tr>
<td>AUMT 1345</td>
<td>Automotive Climate Control Systems</td>
<td>ASE A7: Heating and Air Conditioning and ASE Refrigerant Recovery and Recycling Certification required</td>
</tr>
<tr>
<td>AUMT 1407</td>
<td>Automotive Electrical Systems</td>
<td>ASE A6: Electrical/Electronic Systems</td>
</tr>
<tr>
<td>AUMT 1410</td>
<td>Automotive Brake Systems</td>
<td>ASE A5: Brakes</td>
</tr>
<tr>
<td>AUMT 1416</td>
<td>Automotive Suspension and Steering Systems</td>
<td>ASE A4: Steering and Suspension</td>
</tr>
<tr>
<td>AUMT 1419</td>
<td>Automotive Engine Repair</td>
<td>ASE A1: Engine Repair</td>
</tr>
<tr>
<td>AUMT 1445</td>
<td>Automotive Climate Control Systems</td>
<td>ASE A7: Heating and Air Conditioning and ASE Refrigerant Recovery and Recycling Certification required</td>
</tr>
<tr>
<td>AUMT 2413</td>
<td>Automotive Drivetrain and Axles</td>
<td>ASE A3: Manual Drive Train and Axles</td>
</tr>
<tr>
<td>AUMT 2417</td>
<td>Automotive Engine Performance Analysis I</td>
<td>ASE A8: Engine Performance</td>
</tr>
<tr>
<td>AUMT 2421</td>
<td>Automotive Electrical Diagnosis and Repair</td>
<td>ASE A6: Electrical/Electronic Systems</td>
</tr>
<tr>
<td>AUMT 2425</td>
<td>Automotive Automatic Transmission and Transaxle</td>
<td>ASE A2: Automatic Transmission/Transaxle</td>
</tr>
<tr>
<td>AUMT 2434</td>
<td>Automotive Engine Performance Analysis II</td>
<td>ASE A8: Engine Performance</td>
</tr>
</tbody>
</table>

### Business Office Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACNT 1303</td>
<td>Introduction to Accounting I</td>
<td>Certified Administrative Professional (CAP)</td>
</tr>
<tr>
<td>POFT 1319</td>
<td>Records and Information Management I</td>
<td>Certified Administrative Professional (CAP)</td>
</tr>
</tbody>
</table>

### Child Development

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 1417</td>
<td>Child Development Associate Training I</td>
<td>Child Development Associate credential awarded by Council for Professional Recognition</td>
</tr>
</tbody>
</table>
### Computer Information Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITCC 1314</td>
<td>CCNA 1: Introduction to Networks</td>
<td>Cisco Certified Network Associate (CCNA) Certification (completed in last 18 months)</td>
</tr>
<tr>
<td>ITCC 1440</td>
<td>CCNA 2: Routing and Switching Essentials</td>
<td>Cisco Certified Network Associate (CCNA) Certification (completed in last 18 months)</td>
</tr>
<tr>
<td>ITCC 2412</td>
<td>CCNA 3: Scaling Networks</td>
<td>Cisco Certified Network Associate (CCNA) Certification (completed in last 18 months)</td>
</tr>
<tr>
<td>ITCC 2413</td>
<td>CCNA 4: Connecting Networks</td>
<td>Cisco Certified Network Associate (CCNA) Certification (completed in last 18 months)</td>
</tr>
<tr>
<td>ITNW 1325</td>
<td>Fundamentals of Networking</td>
<td>Net+ Certification (completed in last 3 years)</td>
</tr>
<tr>
<td>ITNW 1354</td>
<td>Implementing and Supporting Servers</td>
<td>Server + Certification</td>
</tr>
<tr>
<td>ITSC 1307</td>
<td>UNIX Operating System</td>
<td>Linux + Certification</td>
</tr>
<tr>
<td>ITSC 1325</td>
<td>Personal Computer Software</td>
<td>A+ Certification</td>
</tr>
<tr>
<td>ITSY 1342</td>
<td>Information Technology Security</td>
<td>Security + Certification</td>
</tr>
</tbody>
</table>

### Construction Management Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNBT 1210</td>
<td>Basic Construction Safety</td>
<td>OSHA Safety Certification (30 or more hours General Industry Training course)</td>
</tr>
</tbody>
</table>

### Cosmetology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSME 2445</td>
<td>Instructional Theory and Clinical Operation</td>
<td>Cosmetology Operator Instructor</td>
</tr>
<tr>
<td>CSME 2544</td>
<td>Cosmetology Instructor IV</td>
<td>Cosmetology Operator Instructor</td>
</tr>
</tbody>
</table>

### Criminal Justice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJLE 1333</td>
<td>Traffic and Law Investigation</td>
<td>Texas Commission on Law Enforcement (TCLEOSE) licensing exam after 1983</td>
</tr>
<tr>
<td>CJSA 1348</td>
<td>Ethics in Criminal Justice</td>
<td>Texas Commission on Law Enforcement (TCLEOSE) licensing exam after 1983</td>
</tr>
<tr>
<td>CJSA 1351</td>
<td>Use of Force</td>
<td>Texas Commission on Law Enforcement (TCLEOSE) licensing exam after 1983</td>
</tr>
</tbody>
</table>

### Culinary Arts

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEF 1205</td>
<td>Sanitation and Safety</td>
<td>ServSafe Certification</td>
</tr>
</tbody>
</table>

### Diagnostic Medical Sonography

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO 1302</td>
<td>Basic Ultrasound Physics</td>
<td>American Registry of Diagnostic Medical Sonographers (ARDMS)</td>
</tr>
<tr>
<td>DMSO 1342</td>
<td>Intermediate Ultrasound Physics</td>
<td>American Registry of Diagnostic Medical Sonographers (ARDMS)</td>
</tr>
</tbody>
</table>

### Emergency Medical Technician

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMSP 1160</td>
<td>Clinical – Emergency Medical Technician</td>
<td>TDH EMT- Basic Certification or higher</td>
</tr>
<tr>
<td>EMSP 1501</td>
<td>Emergency Medical Technician - Basic</td>
<td>TDH EMT- Basic Certification or higher</td>
</tr>
</tbody>
</table>

### Firefighter Certification

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRS 1301</td>
<td>Firefighter Certification I</td>
<td>Texas Commission on Fire Protection (TCFP) Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1313</td>
<td>Firefighter Certification III</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
</tbody>
</table>
### Fire and Rescue

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRS 1319</td>
<td>Firefighter Certification IV</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1323</td>
<td>Firefighter Certification V</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1423</td>
<td>Firefighter Certification V</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1329</td>
<td>Firefighter Certification VI</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1333</td>
<td>Firefighter Certification VII</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1433</td>
<td>Firefighter Certification VII</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRS 1407</td>
<td>Firefighter Certification II</td>
<td>TCFP Firefighter Basic Certification or higher</td>
</tr>
<tr>
<td>FIRT 1303</td>
<td>Fire Arson Investigation I</td>
<td>TCFP Fire or Arson Investigator Certification</td>
</tr>
<tr>
<td>FIRT 1315</td>
<td>Hazardous Materials I</td>
<td>TCFP HAZMAT Operations</td>
</tr>
<tr>
<td>FIRT 1342</td>
<td>Fire Officer I</td>
<td>TCFP Fire Officer I Certification</td>
</tr>
<tr>
<td>FIRT 1343</td>
<td>Fire Officer II</td>
<td>TCFP Fire Officer II Certification</td>
</tr>
<tr>
<td>FIRT 1345</td>
<td>Hazardous Materials II</td>
<td>TCFP HAZMAT Technicians</td>
</tr>
<tr>
<td>FIRT 1408</td>
<td>Inspector I</td>
<td>TCFP Fire Inspector Certification</td>
</tr>
<tr>
<td>FIRT 1440</td>
<td>Inspector II</td>
<td>TCFP Fire Inspector Certification</td>
</tr>
<tr>
<td>FIRT 2112</td>
<td>Hazardous Materials Incident</td>
<td>TCFP HAZMAT Incident Commander</td>
</tr>
<tr>
<td>FIRT 2305</td>
<td>Fire Instructor I</td>
<td>TCFP Fire Instructor I</td>
</tr>
<tr>
<td>FIRT 2133</td>
<td>Fire Arson Investigation II</td>
<td>TCFP Fire or Arson Investigator Certification</td>
</tr>
<tr>
<td>FIRT 2356</td>
<td>Fire Officer III</td>
<td>TCFP Fire Officer III</td>
</tr>
<tr>
<td>FIRT 2357</td>
<td>Fire Officer IV</td>
<td>TCFP Fire Officer IV</td>
</tr>
<tr>
<td>FIRT 2359</td>
<td>Fire Instructor III</td>
<td>TCFP Fire Instructor III</td>
</tr>
</tbody>
</table>

### Maritime Transportation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAUT 1171</td>
<td>Medical Care Provider</td>
<td>U.S. Coast Guard Medical Care Provider Certificate</td>
</tr>
<tr>
<td>NAUT 1174</td>
<td>Maritime Regulation and Management</td>
<td>U.S. Coast Guard 100 Ton or above Master Certification</td>
</tr>
<tr>
<td>NAUT 1273</td>
<td>Engineering Familiarization</td>
<td>U.S. Coast Guard 100 Ton or above Master Certification</td>
</tr>
<tr>
<td>NAUT 1274</td>
<td>Marine Cargo Operations II</td>
<td>U.S. Coast Guard Tankerman Certification, or US Coast Guard 100 Ton Master Certification</td>
</tr>
</tbody>
</table>

### Seafaring

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAUT 1276</td>
<td>Seafaring II</td>
<td>U.S. Coast Guard 100 Ton or above Master Certification</td>
</tr>
<tr>
<td>NAUT 1372</td>
<td>Seafaring I</td>
<td>U.S. Coast Guard Able Seaman Certification, and U.S. Coast Guard Vessel Security Officer Certification, and U.S. Coast Guard RFPNW Certification or U.S. Coast guard 200 Ton or above Master Certification</td>
</tr>
<tr>
<td>NAUT 1374</td>
<td>Basic Safety and Survival Training</td>
<td>U.S. Coast Guard Able Seaman Certification, or U.S. Coast guard 100 Ton or above Master Certification with STCW and lifeboatman endorsements</td>
</tr>
</tbody>
</table>

### San Jacinto College 2018-2019
## Medical Laboratory Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAB 1223</td>
<td>Phlebotomy</td>
<td>American Society of Clinical Pathologists Certification</td>
</tr>
</tbody>
</table>

## Non-Destructive Testing Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDTE 1301</td>
<td>Film Interpretations of Weldments</td>
<td>ASNT Level II: Radiographic Film Interpretation; or AWS Certified Radiographic Interpreter; or NAS 410/MIL-STD-410E UT Level 2 Certification.</td>
</tr>
<tr>
<td>NDTE 1405</td>
<td>Introduction to Ultrasonic Testing Level 1 &amp; 2</td>
<td>ASNT UT Level II Certification; or NAS 410/MIL-STD-410E UT Level 2 Certification. (or higher); or API QUTE; or API QUPA; or API QUSE Certification.</td>
</tr>
<tr>
<td>NDTE 1410</td>
<td>Liquid Penetrant, Magnetic Particle &amp; Visual Testing</td>
<td>Combination of both a MT &amp; PT Certification from any combination of the following: ASNT Level II Certification; or NAS 410/MIL-STD-410E UT Level 2 Certification. (or higher)</td>
</tr>
<tr>
<td>NDTE 1440</td>
<td>Eddy Current Testing</td>
<td>ASNT ET Level II Certification; (or higher)</td>
</tr>
<tr>
<td>NDTE 1454</td>
<td>Intermediate Ultrasonics: Flaw Detection and Sizing</td>
<td>ASNT UT Level III Certification; or API QUTE; or API QUPA; or API QUSE Certification.</td>
</tr>
<tr>
<td>NDTE 2339</td>
<td>Power Piping Inspection</td>
<td>API 570 Piping Inspector Certification; or, ASME Authorized Inspector Certification (AI).</td>
</tr>
<tr>
<td>NDTE 2401</td>
<td>Advanced Ultrasonics</td>
<td>API QUPA Certification.</td>
</tr>
<tr>
<td>NDTE 2411</td>
<td>Prep for Certified Weld Inspector Exam</td>
<td>AWS CWI, or CAWI, or SCWI Certification; or, API 577 Welding Inspection &amp; Metallurgy certification.</td>
</tr>
<tr>
<td>NDTE 2470</td>
<td>Pressure Vessel Inspection</td>
<td>API 510 Pressure Vessel Inspector Certification; or, ASME AI Certification.</td>
</tr>
<tr>
<td>QCTC 1341</td>
<td>Statistical Process Control</td>
<td>Any of the following ASQ Certifications: CQE, CQPA, CMQ/ OE, 6Sigma, any Belt; or an ASQ/AME/SME LEAN Certification.</td>
</tr>
</tbody>
</table>

## Pharmacy Technician

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHRA 1243</td>
<td>Pharmacy Technician Certification Review</td>
<td>Certified Pharmacy Technician</td>
</tr>
</tbody>
</table>

## Physical Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHED 1306</td>
<td>First Aid</td>
<td>Red Cross CPR Certification and First Aid Certification</td>
</tr>
</tbody>
</table>

## Real Estate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELE 1201</td>
<td>Principles of Real Estate I</td>
<td>Active Texas Real Estate Salesperson License</td>
</tr>
<tr>
<td>RELE 1238</td>
<td>Principles of Real Estate II</td>
<td>Active Texas Real Estate Salesperson License</td>
</tr>
<tr>
<td>RELE 1303</td>
<td>Real Estate Appraisal</td>
<td>Active Appraisal License</td>
</tr>
<tr>
<td>RELE 1315</td>
<td>Property Management</td>
<td>Current Certified Property Management Designation (CPM)</td>
</tr>
<tr>
<td>RELE 1319</td>
<td>Real Estate Finance</td>
<td>Active Mortgage Loan Originator License</td>
</tr>
<tr>
<td>RELE 1321</td>
<td>Real Estate Marketing</td>
<td>Current Graduate REALTORS ® Institute (GRI) Designation</td>
</tr>
<tr>
<td>RELE 2301</td>
<td>Law of Agency</td>
<td>Active Texas Real Estate Salesperson License</td>
</tr>
</tbody>
</table>
Surgical Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Licensure or Industry Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRGT 2130</td>
<td>Professional Readiness</td>
<td>Certified Surgical Technologist (CST)</td>
</tr>
</tbody>
</table>

Advanced Placement without Credit

Many departments permit advanced placement without college credit. Students should contact the department chair for information.

Transcripts from San Jacinto College

The San Jacinto College transcript serves as the student grade report since no other printed grades are provided. Students may print an unofficial transcript online.

Students can obtain an official transcript at no charge by one of three ways: online, in person or in writing.

1. Go to www.sanjac.edu/soslogin, go to Student Records and Request Official Transcript.
2. To request a transcript in person, bring a photo ID to the Educational Planning, Counseling & Completion. These requests are normally filled immediately; however, there may be longer processing time during peak registration periods. If the student desires for someone else to pick up the transcript, that person needs the student's written permission (name, student's generated ID, number and signature plus the name of the authorized individual) as well as his/her own picture ID.
3. Students may send a written request to the Records Management office for an official transcript. The request for an official transcript should include the student's name, name while enrolled at San Jacinto College, student's generated ID number, date of birth, dates of attendance, address to which the transcript is to be mailed, a signature and a copy of his/her picture ID. Except during registration periods, processing and mailing of transcripts should be completed within two work days of receipt of the request. There is no charge for transcripts.

Official transcripts will not be released if there are any outstanding admission requirements or financial obligations to the College. The College cannot provide official copies of any other college or high school transcripts held. Those should be requested directly from the issuing institutions.

Retention and Disposal of Student Records

San Jacinto College follows the American Association of Collegiate Registrars and Admissions Officers (AACRAO) guidelines and the U.S. Department of Education Local Retention Schedule Junior College as submitted to the Texas State Library and Archives Commission for keeping and disposing of records. The College electronically images and maintains official required documents.

Transfer of Credit

Common Course Numbering System

San Jacinto College is a member of the Texas Common Course Numbering System. Institutions of higher education in Texas teach similar courses and these courses have a common number. This common number facilitates transferring these courses among the participating institutions.

The Texas Common Course Numbering System Manual identifies general academic courses that transfer. It does not include college preparatory and technical courses. The common number system makes it easier for students to plan future studies.

For example, ENGL 1301 Composition I at San Jacinto College, has the common course number ENGL 1301 Composition I. Some institutions adopt the common course number as their number. Other institutions may not change their course numbers to common course numbers but may display common course numbers alongside their existing course numbers. Three possible ways of presenting ENGL 1301 Composition I are:

<table>
<thead>
<tr>
<th>San Jacinto Course Number</th>
<th>Other Institutions Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301 Composition I</td>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
<td>ENGL 101 (ENGL 1301) Freshman Composition I</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
<td>LANG 1311 Rhetoric and Composition (ENGL 1301)</td>
</tr>
</tbody>
</table>

Once students understand this system, they can easily match the courses they have taken at San Jacinto College to the corresponding courses at other member institutions. However, since not all courses are common courses, students should obtain a list of courses recognized by the school to which they plan to transfer. Many courses not recognized as common at a member institution may still have equivalents at that institution that will transfer and fulfill degree requirements.

Students can get more information about the Texas Common Course Numbering System at San Jacinto College from the Admissions Office on any campus.

Academic Course Guide Manual

Lower-division courses included in the Academic Course Guide Manual and specified in the definition of lower-division course credit shall be freely transferable to and accepted as comparable degree credit by any public institution of higher education where the equivalent course is available for fulfilling baccalaureate degree requirements. However, each Texas institution of higher education may have limitations that invalidate courses after a specific length of time. Specifically excluded are courses designated as vocational, ESL/ESOL, technical and college preparatory courses listed as basic skills.

Transfer of Credit to San Jacinto College

San Jacinto College follows these policies for students who wish to transfer credit for courses taken at other colleges and universities:

1. College-level course work: All grades received on college-level course work will be transferred into the College. Courses completed with grades of A, B, C and D or P will be eligible for use toward graduation if consistent with program requirements. Transfer grades will not be included in the San Jacinto College GPA calculation.
2. College preparatory course work: Grades of A, B and C in college preparatory course work will be used at San Jacinto College for placement in college preparatory courses and skill levels decisions only. No college preparatory course will be eligible for use toward graduation. No college preparatory transfer grades will be included in the San Jacinto College GPA calculation.
3. Financial aid: All grades on all prior courses attempted, both college-level and college preparatory, will be included in the total hours attempted calculations for financial aid purposes.

4. The institution from which the student is attempting to transfer credit must be accredited through one of the following associations:

<table>
<thead>
<tr>
<th>Accrediting Agency</th>
<th>Commission Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle States Association of Colleges and Schools</td>
<td>Commission on Higher Education</td>
</tr>
<tr>
<td>New England Association of Schools and Colleges</td>
<td>Commission on Institutions of Higher Education</td>
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<td>Higher Learning Commission</td>
<td>Commission on Institutions of Higher Education</td>
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<td>Northwest Association of Colleges and Schools</td>
<td>Commission on Colleges</td>
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<td>Southern Association of Colleges and Schools</td>
<td>Commission on Colleges</td>
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<td>Western Association of Schools and Colleges</td>
<td>Accreditation Commission for Senior Colleges and Universities</td>
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<td>Western Association of Schools and Colleges</td>
<td>Accrediting Commission for Community and Junior Colleges</td>
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</table>

Students who have completed course work from non-accredited institutions may be eligible to receive credit by examination.

Upon request by the student, transfer course work will be evaluated to determine if course work completed at other institutions is equivalent to courses offered at San Jacinto College.

An approved firm or organization that specializes in evaluating international education credentials must evaluate course work completed at colleges and universities outside the United States before San Jacinto College will consider that course work for transfer credit or for admission to special programs. The firm or organization must be on the San Jacinto College approved list. Documents must be either originals or certified copies and may have to be translated into English. The Admissions Office and the international student counselor offer help in locating translation and evaluation organizations recognized by San Jacinto College. For a complete list of approved companies, go to Approved Evaluation Services.

Transfer of Credit from San Jacinto College

The receiving institution decides whether to accept San Jacinto College academic (ACGM) courses in transfer and to apply those courses to individual degree plans. Students planning to transfer San Jacinto College course work to another college or university should always consult the college or university catalog and proper officials of that institution to determine the best courses to take for transfer. Some universities or programs do not accept grades of D in transfer.

Transfer Disputes Resolution

The Texas Higher Education Coordinating Board, under the requirements of Section 61.078 of the Education Code, has established procedures to resolve disputes between public institutions of higher education involving the transfer of credit from lower-division courses (courses offered in the first two years of college study).

Resolution of Transfer Disputes for Lower-Division Courses

1. Each public college and university must accept in transfer into a baccalaureate degree the number of lower-division credit hours in a major which are allowed for their non-transfer students in that major; however,

2. No institution must accept for transfer more credit hours in a major than the number set out in the applicable Coordinating Board approved Transfer Curriculum for that major.

3. For any major that has no Coordinating Board approved transfer curriculum, no institution must accept in transfer more lower-division course credit in the major applicable to a baccalaureate degree than the institution allows its non-transfer students in that major.

4. A university may deny the transfer of credit in courses with a grade of D as applicable to the student’s field of study courses, core curriculum courses or major if it denies credit in those same courses with a grade of D to its own students.

No university must accept in transfer or toward a degree more than sixty-six (66) credit hours of academic credits earned by a student in a community college. Universities, however, may choose to accept additional credit hours.

Universities are not required to accept technical (WECM) courses in transfers. However, these universities that offer BAAS degrees may accept technical courses. Students are advised to contact the receiving institution.

Public institutions of higher education shall follow these procedures to resolve credit transfer disputes involving lower-division courses:

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied. A receiving institution shall also provide written notice of the reasons for denying credit for a particular course or set of courses at the request of the sending institution.

2. A student who receives notice, as specified above, may dispute the denial of credit by contacting a designated official at either the sending or receiving institution.

3. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and guidelines.

4. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution that denies the course credit for transfer shall notify the Commissioner of its denial and the reasons for the denial.

The Commissioner of Higher Education or the Commissioner’s designee shall make the final determination about a dispute regarding the transfer of course credit and give written notice of the determination to the involved student and institutions.

The Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner or the Commissioner’s designee.

If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an
acceptable level of quality, it should first contact the sending institution and attempt to resolve the problem.

In the event that the two institutions are unable to come to a satisfactory resolution, the receiving institution may notify the Commissioner of Higher Education, who may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

**Articulated Credit from High School**

High school articulation is an agreement between San Jacinto Community College District and an ISD to award college credit toward workforce courses in a certificate or an associate of applied science (A.A.S.) degree. At the request of school districts, agreements are developed when Advanced Technical Credit (ATC)-qualified high school instructors and course curriculum matches that of SJCD credit workforce courses. Agreements are honored and students may apply for course credits under the condition that students meet all eligibility requirements. Articulated credit is awarded for credit workforce (WECM) courses only.

The student's official high school transcript is the official document college personnel review to determine student eligibility for credit. Texas Education Agency (TEA) and ATC require independent school districts to include the course type code “A” to indicate the student completed an articulated course. SJCD does not award credit without the “A.”

Students must meet specific eligibility criteria in addition to general CPL criteria aforementioned:

- High school course marked with an “A” in the course type column on the high school transcript
- Students must enroll at SJCD within 15 months of their high school graduation date and petition for credit within 24 months of their high school graduation date
- Students must complete the high school course(s) with a grade of 80 or better
- Students must complete the high school course or course sequence during their 11th or 12th grade in high school
- The course(s) sought must be a part of or related to the student’s college technical certificate or degree plan, including approved electives
- Student must transcript at least 3 semester credit hours of college credit courses prior to awarding the articulated credit

**Student Rights and Responsibilities**

San Jacinto College holds that the student, upon enrollment, neither loses the right nor escapes the duties of citizenship. The student-citizen must exercise liberty with responsibility. The enumeration of the following rights and responsibilities shall in no way be interpreted as being all-inclusive and denying the existence of other rights and responsibilities which a student holds as a student or citizen.

**Student Rights**

**Right to Review One’s Educational Records and to File Complaints Regarding Them**

The Family Educational Rights and Privacy Act (FERPA) provides students with certain rights with respect to their personal educational records. These general rights include the right of access to one’s educational records, the right to request corrections to one’s records, and the right to prevent disclosure of the student’s records except when authorized by FERPA. The college’s specific policies and procedures regarding FERPA can be found on the college website.

**Academic Evaluation Rights**

Students have the right to be apprised of the methodology by which they will be evaluated in their formal course work. Also, students shall have appeal rights to challenge final grades. Please refer to Complaint Procedure 100: Grade Appeal Process found in the Student Handbook or Catalog.

**Intellectual Property Rights**

Students shall retain their intellectual property rights on projects produced as a result of their individual initiative and that involved only incidental use of College facilities and resources. If the student is working on a project initiated and funded by San Jacinto College, ownership resides with the College.

**Right to Appeal Financial Aid Suspension**

Students may submit Financial Aid appeals due to extenuating circumstances that have affected the student's academic performance. Extenuating circumstances are situations such as serious injury or illness, a death in the immediate family, or undue hardship. Detailed information about the financial aid appeal process, requirements, and guidelines can be found on the College website.

**Right to Freedom of Association**

Students bring to the College a variety of interests. Students have the freedom to organize and join associations to promote their common interests in accordance with the policies and procedures of the College. Please visit the Student Engagement and Activities Office on your campus for more information.

**Right to Freedom of Inquiry and Expression**

Students and student organizations are free to examine and discuss matters of interest to them and to express opinions publicly and privately by orderly means which do not disrupt the regular and normal operation of the institution, and which comply with the regulations that relate to student conduct. At the same time, it should be made clear to the educational community and public that in their public expressions or demonstrations, students or student organizations do not represent the institution and speak only for themselves. Please visit the Student Engagement and Activities Office on your campus for more information.

**Right to Freedom from Illegal Discrimination**

It is the policy of the San Jacinto Community College District not to discriminate on the basis of race, creed, color, national origin, citizenship status, age, disability, pregnancy, religion, gender, sexual orientation, genetic information, marital status or veteran status in accordance with applicable federal and state laws. The following officials have been designated to respond to inquiries regarding the College's non-discrimination policies:

**Vice Chancellor, Human Resources**

Stephen Trncak - Equal Opportunity Compliance Officer
4624 Fairmont Parkway
Pasadena, Texas 77504
stephen.trncak@sjcd.edu
281-998-6348

**Associate Vice Chancellor, Student Services**

Joanna Zimmermann (students) - Co-Lead Title IX Coordinator
8060 Spencer Highway

San Jacinto College 2018-2019
Right to Due Process
The College has an enduring commitment to provide students with a balanced and fair student discipline system. The College will provide students with the appropriate due process protections to which they are entitled under the U.S. Constitution Fourteenth Amendment. The amount of due process required will depend upon the seriousness of the alleged violation and the proposed sanction. At a minimum, a student charged with alleged violations of the Code of Student Conduct has the right to:

- have their case processed without reasonable delay
- receive prompt written notice of alleged violations per the Code of Student Conduct and an explanation of the evidence against the student
- receives a meaningful opportunity to be heard in one’s defense

For more detailed information about the College’s investigation procedures, hearing procedures, and appeal procedures, please refer to the Code of Student Conduct found in the Student Handbook.

Right to Freedom from Sexual Assault, Dating Violence, Domestic Violence and Stalking
In accordance with the Campus SaVE Act in the Violence Against Women Act amendments to the Clery Act, San Jacinto College provides on going awareness and prevention training, procedures and resources to prevent the occurrence of sexual assault, dating violence, domestic violence and stalking. The College also provides an equitable complaint process that provides for prompt investigation of complaints and the imposition of sanctions against students who are found in violation of this code. For more information about student-related training, contact the Compliance & Judicial Affairs Office.

Right to Equity in Athletics
The Equity in Athletics Disclosure Act (EADA) is intended to make prospective students aware of a school’s commitment to providing equitable opportunities for its male and female students. Each year, San Jacinto College produces an EADA report available to current and prospective students and to the public. If you would like to review the full report or to request a copy of San Jacinto College’s EADA report, please contact the Vice Chancellor of Strategic Initiatives office at 281-459-7140.

Right to Involvement in Decision Making
San Jacinto College provides an opportunity for student involvement in the decision making process through the respective forms of student government on the three campuses. As constituents of the educational community, students may express their views on issues of institutional policy and on matters of general interest to the student body.

In addition to membership in student associations and organizations, students shall be given the opportunity to serve on campus and College committees as deemed appropriate by the College. For more information, please visit the Student Engagement & Activities office on your campus.

Right to Amnesty for Drug or Alcohol Possession and Consumption Violations
Students are strongly encouraged to report incidents of, or share information about, sex-based discrimination, sexual harassment and sexual misconduct as soon as possible. This is true even if the alleged victim of the misconduct or if a witness to the misconduct was under the influence of drugs or alcohol on the occasion in question. The Compliance & Judicial Affairs office will not pursue disciplinary sanctions against the alleged victim or witness for his or her improper use of alcohol or drugs if the student is making a good faith report of sexual misconduct. For more information, please contact the Compliance & Judicial Affairs office.

Student Responsibilities
In voluntarily enrolling at the College, students have the responsibility to comply with all state and federal laws and college regulations and policies governing student conduct and academic affairs. Students assume responsibility for their behavior and acknowledge and share the following responsibilities:

- Students must recognize that the Board of Trustees is the policy making authority for the operation of the San Jacinto Community College District. The Board delegates to the College administration the authority to implement Board policy through procedures, regulations, guidelines and handbooks.
- Students must understand that while education is a shared activity, the ultimate responsibility for learning rests with the student.
- Students are responsible, collectively and individually, for allowing other students to continue their pursuit of education. Students must refrain from interfering with the rights of other students in their educational pursuits or with employees in the exercise of their duties.
- The right to disagree is well established. However, students must make sure that disagreement is factual and is presented with respect for those with whom they are disagreeing, including faculty, staff, administration, other students and campus visitors. When approaching the administration about any matter, students must go through established channels of communication and authority.
- Students have a responsibility to comply with copyright law and to educate themselves regarding copyright infringement, peer-to-peer file sharing and penalties for violations. For information and resources, please visit http://www.sanjac.edu/policy-vi-k-policy-regarding-appropriate-use-copyrighted-materials.
- Students must comply with the policies, rules, regulations and generally accepted practices of the College currently in effect or as they may be amended. All policies, rules, regulations, and practices are subject to amendment at any time during the student’s enrollment.
- Students also have the responsibility to comply with all state and federal regulations governing their participation in higher education. Such regulations and laws as may exist or that may be subsequently enacted and adopted shall have precedence over the provisions of this document of student rights.
Cheating, Plagiarism, Collusion and Fabrication

Code of Academic Integrity and Honesty

Integrity is one of the core values at San Jacinto College. As such, students are expected to exhibit honesty, integrity, high standards, and freedom from lies and fraud in their academic work. Personal integrity is important in all aspects of life and students must conduct themselves in an ethical manner both in and out of the classroom. Incidents of academic dishonesty will not be tolerated and students guilty of such conduct are subject to disciplinary consequences.

Cheating, Plagiarism, Collusion and Fabrication Procedure

The following institutional guidelines concerning cheating, plagiarism, collusion and fabrication are provided for the information of all students enrolled in any course offered by San Jacinto College. Gaining knowledge and practicing honesty go hand in hand. The importance of knowledge properly gained is reinforced by the grading system, therefore, honesty fully practiced is emphasized by rules against cheating, plagiarism, collusion, and fabrication. Any act of cheating, plagiarism, collusion, or fabrication in any degree subjects a student to the disciplinary procedures listed below.

Cheating

Students are expected to be completely honest in all phases of their work and must adhere to the guidelines provided by their faculty members for completing academic work.

Cheating includes, but is not limited to, the following:

- dishonesty of any kind on examinations, assignments, or program requirements,
- unauthorized possession of examinations or unapproved notes or sources at any time, whether used or not,
- copying or obtaining information from another student during an examination or performance of a lab skill or competency,
- claiming as their own work any portion of academic work that was completed by another student,
- using materials not approved by their faculty member when completing an assignment or exam,
- presenting the same work for more than one course without obtaining approval from the course faculty member,
- alteration or falsification of course or academic records, and
- unauthorized entry into or presence in any office.

Plagiarism

Documenting the use of others’ work is important because it recognizes the original author’s effort, establishes the student writer’s credibility and supports the audience’s future research. Plagiarism is offering the work of another as one’s own, intentionally or unintentionally, without proper acknowledgment. Students who fail to give appropriate credit for ideas or material they take from another, whether a fellow student or a resource writer, are guilty of plagiarism (i.e., stealing the words or ideas of another).

The College may contract with companies or organizations that provide plagiarism-detection services. Such companies may receive students’ work for the purpose of comparing the students’ work with a reference database. Students enrolling at San Jacinto College agree as a condition of their enrollment that their work may be submitted to such companies for the purpose of plagiarism detection and that the company may retain a copy of the work for plagiarism-detection purposes. Such companies will not copy, use or distribute the students’ work.

Plagiarism includes, but is not limited to, the following:

- using the ideas and or words of another person, without giving that person appropriate credit,
- representing another’s artistic or scholarly works (i.e., musical compositions, computer programs, photographs, paintings, drawings, sculptures, etc.) as your own,
- submitting a paper purchased in whole or in part from another person or other sources, including the internet,
- copying computer programs or data files belonging to someone else, and
- using undocumented Web sources.

Collusion

Learning is an active process for all students; completion and submission of original work is essential to the learning process. Collusion is unauthorized collaboration in preparing any work offered for credit. Therefore, students should take reasonable precautions to protect their work from being compromised.

Collusion includes, but is not limited to, the following:

- knowingly using, buying, selling, stealing, sharing, transporting or soliciting, in whole or in part, any information or materials to be submitted as a student’s own work,
- impersonating another student for the purpose of taking a course, any academic work, or exam,
- providing unauthorized access to course materials, and
- agreeing with one or more persons to commit any act of academic dishonesty.

Fabrication

Fabrication is all experimental data, observations, interviews, statistical surveys, and other information collected and reported as academic work not authenticated.

Fabrication includes, but is not limited to, the following:

- falsifying the results obtained from research or laboratory experiments,
- presenting results of research or laboratory experiments without the research or laboratory experiments being performed, and
- changing answers or grades after an academic work has been returned to the student.

Responding to Violations

Faculty have the responsibility to initiate disciplinary action in response to violations of the rules regarding academic honesty. A faculty member is responsible for investigating these violations which includes, but is not limited to, collection of any evidence of cheating at the time it occurs and discussions with the student and witnesses. A student may not withdraw from the course during the investigation of an incident of academic dishonesty or when a course grade of F has been imposed. A record will
be kept of any imposed penalty or disciplinary action. These violations of academic dishonesty are also communicated with respective department chairs/program directors and deans.

**Penalties**

If, in the judgment of the faculty member, cheating, plagiarism, collusion, or fabrication has occurred, he or she may assess one of the following penalties:

- failure of the assignment by the faculty member
- require student to redo test or assignment
- reduced grade on the assignment by the faculty member
- failure of the course; the student may appeal the grade through the Grade Appeal process *(see Complaint Procedure 100 found in the Catalog or Student Handbook)*
- recommendation for suspension from the College or dismissal from a program, which is submitted to the Provost
- other

The faculty member will notify the student of his or her decision concerning the student’s grade. Other disciplinary action may be recommended by the College if code of student conduct violations have occurred. If a student will not meet with the faculty member or if notification cannot take place because of a student’s unavailability, failure to respond, or incorrect contact information, the process proceeds as specified. Should the faculty member recommend suspension or dismissal of the student, the Provost has the responsibility and authority to determine whether the student will be suspended or dismissed.

The faculty member will prepare an online Academic Dishonesty Incident Report for the Provost, the Dean, Department Chair and/or Program Director. The report indicates the nature of the incident, student identifying information, and the proposed penalty. The Department Chair will generate a decision letter to the student that will include the proposed penalty and the student’s appeal rights.

**Appeals**

A student may appeal a proposed penalty made by a faculty member. The student shall initiate the appeal process within five (5) days following the communication of the proposed penalty. The procedures for appealing a proposed penalty are:

- Student meeting with Academic Dishonesty Appeals Committee: Within five (5) working days after receiving written notification of the proposed penalty via email (or first-class mail when necessary), a student may request a hearing before an Academic Dishonesty Appeals Committee. The student must submit a written request directly to the respective Campus Provost either via email or with a mailed letter. A first-class letter will be deemed to have been received on the second day after the sending of the message. An email will be deemed to have been received on the second day after the sending of the message.
- The committee will consist of one full-time faculty member to be named by the student, one full-time faculty member to be named by the faculty member, and one full-time faculty member to be named by the Provost. The Provost will request that the student and faculty member submit the name of their nominees within five (5) working days after notification of all parties involved. Upon receiving the names of those nominees, and appointing a third faculty member to the committee, the Provost will set the time, date, and place of the closed hearing and notify all parties. This will be done within five (5) working days after having received the names of both nominees. A student may present written evidence relevant to the appeal and may also be accompanied by an advisor. The student’s advisor may attend the appeal meeting and confer with the student but may not cross-examine other participants. The student may have a maximum of two (2) persons (faculty member and advisor) in the room at the appeal committee meeting. Furthermore, an advisor may not be a witness in the matter.
- The Academic Dishonesty Appeals Committee may request information from the faculty member, student, and/or other persons familiar with the matter. The College retains the right to have legal counsel present at the appeal meeting but the attorney may not cross-examine other participants.
- In the event that a student is a qualified person with a disability under federal law and is unable to represent himself or herself at the appeal meeting because of his or her disability, the College, as a reasonable accommodation to the student, will permit the student to be represented by an advisor at the meeting. If the student is represented by legal counsel, then the College also may be represented by legal counsel.
- Within five (5) working days after the appeal meeting, the Provost will notify the student and the faculty member in writing of the committee’s findings regarding the approval or denial of the appeal. The decision of the Academic Dishonesty Appeals Committee is final.

**Student Absences for Religious Holy Days**

In accordance with Senate Bill 738, a student who is absent from classes to observe a religious holy day will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence, if

1. not later than the 15th day after the first day of the term, the student notifies the professor of each class that the student will be absent for a religious holy day, and
2. the student personally delivers the notification in writing to the professor of each class (with receipt of the notification acknowledged and dated by the professor) or sends a notice by certified mail (with return receipt requested) to the professor of each class.

A student who is excused under Senate Bill 738 will not be penalized for the absence, but the professor will respond appropriately if the student fails to complete satisfactorily the assignment or examination.

**Student Right-to-Know**

The College publishes a statement of Student Rights and Responsibilities in the Student Handbook. The College makes available statistics regarding completion and graduation rates of full-time certificate and degree-seeking students. The reports are available at each campus Provost’s office. The campus police department reports campus crime statistics.

**Family Education Rights and Privacy Act (FERPA)**

San Jacinto College policy VI.6000B, Confidentiality of Student Records outline the regulations that pertain to the confidentiality of education records of San Jacinto College students.

The Family Educational Rights and Privacy Act of 1974 (FERPA) governs the privacy of student educational records. The Act provides eligible students with the right to inspect and review education records, the
The following terms are interpreted as indicated:

**Definition of Terms**

The following terms are interpreted as indicated:

- **Student Records** - any personally identifiable information concerning a student maintained for use by the College. This includes the student's name, address, personal identifiers such as social security numbers, and other personal characteristics or information that make the student's identity easily traceable.

- **Eligible Student** - a student who attends or has attended the school from which records are requested.

- **Custodian** - the Deputy Chancellor and College President of the College.

- **Custodian's Agent** – Provosts, Vice Chancellors, Associate Vice Chancellors, Vice Presidents, Deans and those persons appointed by any of these to safeguard or to use student records.

- **Directory Information** – is a list of items regarding a student of the College that may be made available to the public without the student's prior consent.

- **Legitimate Educational Interest** - an interest of school officials who require access to student records in order to perform their legitimate educational and business duties, when such records are needed in furtherance of the educational or business purposes of the student or College.

- **School Official** - A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. For purposes of this policy, a "school official" is:

  - a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including Campus Police law enforcement unit personnel and health staff)
  - a person or company with whom the College has contracted as its agent to provide a service (such as an attorney, auditor, health care professional or diagnostian, IT computer services professional, or insurer)
  - a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee
  - a student assisting another school official in performing his or her tasks
  - representatives of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as part of their educational programs
  - companies or organizations with whom the College has contracted to provide plagiarism-detection services. Such companies may receive a student's work product for purpose of comparing the student's work with a reference database

- **Student Rights and Responsibilities**

  - A student may ask that
    - School Official - A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. For purposes of this policy, a "school official" is:
      - a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including Campus Police law enforcement unit personnel and health staff)
      - a person or company with whom the College has contracted as its agent to provide a service (such as an attorney, auditor, health care professional or diagnostian, IT computer services professional, or insurer)
      - a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee
      - a student assisting another school official in performing his or her tasks
      - representatives of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as part of their educational programs
      - companies or organizations with whom the College has contracted to provide plagiarism-detection services. Such companies may receive a student's work product for purpose of comparing the student's work with a reference database

  - **Directory Information**
    - Name
    - Address
    - Age (but not birthdate)
    - Degrees earned and dates
    - Major program of study
    - Terms of attendance
    - Previous educational institutions attended
    - Eligibility for and honors and awards received with dates that the honor or award was received
    - Eligibility for and participation in officially recognized activities and sports
    - Weight and height of members of athletic teams and sports statistics
    - Enrollment status (full-time or part-time)

  - **Restricting access to directory information**: A student may ask that directory information be withheld from the public by accessing their student on-line account (SOS) in the student records tab and indicating directory information remain confidential. The student may make this request at any time.

- **Review of Records by the Student**

  - A student's request for examination of his or her FERPA records may be made in person or in writing by the eligible student to the San Jacinto College Marketing Office. The Marketing Office may require proof of identity. The request shall identify the specific record(s) to be examined. Requests shall be honored as soon as practical, but the request must be honored within 45 days. Refer to the college website for information regarding these requests.

  - An inaccurate or inappropriate entry into the records may not be corrected or removed when an eligible student has made a request to review the record and the request has not yet been honored.
• A log of requests for a student’s records shall be maintained by the San Jacinto College Marketing Office in the student’s file indicating all requests, date of requests, by who made, and whether or not each request was honored.

Release of Records
• Student records may not be released to a third party unless the student consents in writing or unless a legally recognized exception applies (see the federal regulations at 34 C.F.R. § 99.31).

Accessibility of Records without Consent
Student records shall be accessible without the student’s consent to the following:

• Other school officials, including faculty members, within San Jacinto College whom the College has determined to have legitimate educational interests. This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in § 99.31(a)(1)(i)(B)(1) - (a)(1)(i)(B)(3) are met. (§ 99.31(a)(1))
• Officials of another school or college where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student’s enrollment or transfer, subject to the requirements of § 99.34. (§ 99.31(a)(2)). The student may request that the College forward a copy of the record to other institutions.
• In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid.
• In connection with a request for “directory information” as designated by the school under § 99.37. (§ 99.31(a)(11))
• State or local officials to whom educational data must be reported.
• Legitimate organizations (ACT, CEEB, ETS) developing, validating, or administering predictive tests or student aid programs. Such data are not to be released in any identifiable form and will be destroyed by the organization after the research has been completed.
• Accrediting agencies
• Parents of a dependent student as defined in Section 152 of the Internal Revenue Code of 1954.
• Appropriate officials in connection with a health or safety emergency.
• In compliance with judicial order or pursuant to any lawfully issued subpoena upon written notice to the affected student.
• Representative of the Comptroller General of the United States, Department of Education, administrative heads of educational agencies, or state education authorities.
• Legitimate agencies providing financial assistance to students, to organizations conducting studies for the purpose of developing, validating, or administering tests, or for the purpose of improving instruction, provided that the information is not to be revealed to a third party.
• A victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of § 99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding.
• Parents of a student regarding the student’s violation of any Federal, State, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21.

Policy Availability and Notice
• A copy of this policy will be made available upon request to eligible students.
• At least once annually, an effort shall be made to inform all eligible students of their rights under the provisions of this policy. Such effort shall be made through the College website, College catalog, and student handbook.

Student Records Management
San Jacinto College policy VI.6000B, Confidentiality of Student Records outline the regulations that pertain to the confidentiality of education records of San Jacinto College students.

The College shall develop and maintain a comprehensive system of student records related to various facets of the College’s operation and shall ensure through reasonable procedures that records are accessed by authorized persons only, as allowed by this policy. These data and records shall be stored in a safe and secure manner and shall be conveniently retrievable for utilization by authorized school officials.

The Deputy Chancellor and College President is custodian of all records for currently enrolled students and for all official academic records; however, he or she may appoint one or more designees, as necessary, to perform record management duties.

Educational records are all records that contain information directly related to a student and are maintained by an educational agency or institution, or by a party acting on its behalf. As used in this policy, “records” includes paper files, electronic and digital files, audio files, and video and photographic files.

Type of Records Maintained
• Academic progress
• Permanent academic data
• Attendance records
• Standardized test results
• Medical records, including meningitis test results
• Student Discipline records
• Book and library records
• Financial aid and other financial records
• Mental health records and counseling information
• Other records related to a student’s day-to-day status
• Any other information in a digital file assigned to a student

Each student record shall be identifiable as to the source. Notes and observations recorded by an individual teacher or other employee and kept for personal use are not official student records except under the following conditions:
• The information is shared with someone other than a substitute for the employee.
• The information is used in preparation of student records.

Definition of Terms
The following terms are interpreted as indicated:
• Student Records - any personally identifiable information concerning a student maintained for use by the College. This includes the student’s name, address, personal identifiers such as social security numbers, and other personal characteristics or information that make the student’s identity easily traceable.

• Eligible Student - a student who attends or has attended the College

• Custodian - the Deputy Chancellor and the College President of the College

• Custodian’s Agent – Provosts, Vice Chancellors, Associate Vice Chancellors, Vice Presidents, Deans and those persons appointed by any of these to safeguard or to use student records

• School Official - A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. For purposes of this policy, a “school official” is:

  • a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including Campus Police law enforcement unit personnel and health staff)
  • a person or company with whom the College has contracted as its agent to provide a service (such as an attorney, auditor, health care professional or diagnostian, IT computer services professional, or insurer)
  • a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee
  • a student assisting another school official in performing his or her tasks
  • representatives of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as part of their educational programs
  • companies or organizations with whom the College has contracted to provide plagiarism-detection services. Such companies may receive a student’s work product for purpose of comparing the student’s work with a reference database

**Accuracy of Information**

If an eligible student believes that information in his or her educational records is inaccurate or misleading or otherwise violates the student’s privacy, a request for correction may be given in writing to the custodian of the record or other school official who is responsible for the record.

• If the correction is not made within a reasonable length of time (a maximum of 30 school days), the student may request a hearing. The Dean of Student Development shall serve as the hearing officer; however, if the Dean of Student Development is the custodian of the record in question or otherwise has a direct interest in the outcome of the hearing, then a designee shall serve as the hearing officer.

• A hearing must be held within a reasonable time (a maximum of 30 school days, barring unforeseeable circumstances) after the request has been made. The hearing officer shall provide the eligible student and the custodian of the record reasonable notice of the date, time and place of the hearing. In advance of the hearing, the custodian of the record shall prepare a packet containing copies of the contested records and any other relevant records or documents, including any applicable policies and procedures. The custodian of the record shall prepare a report summarizing the reasons why he or she believes that the challenged record is not inaccurate or misleading or otherwise a violation of the student’s privacy. The custodian shall provide the packet and report to the student and hearing officer at least one school day prior to the hearing. The student shall have a full and fair opportunity to present his or her own evidence related to the accuracy of the record. The student, at his or her own expense, may be represented by legal counsel or an advisor. The student’s legal counsel or advisor may attend the hearing and confer with the student but may not participate in the hearing.

• The hearing officer shall prepare a written ruling within a reasonable time after the hearing (a maximum of 21 school days). The ruling must be based solely on the evidence presented at the hearing. The ruling must include a summary of the evidence and the reasons for the ruling.

• If the hearing officer concludes that no correction to the record is warranted, the eligible student is to be notified and informed of the right to place in the records a statement either commenting on or setting forth a reason for disagreeing with the school's decision.

• An eligible student who disagrees with the outcome of the hearing may file a complaint with the U.S. Department of Education. The name and address of the office that administers FERPA is the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202.

• A hearing pertaining to student records may be scheduled to challenge the accuracy of recording but not the assignment or merits of a grade.

**Hazing**

Texas criminal law prohibits hazing or hazing-type activities. Hazing is defined as any intentional, knowing or reckless act occurring on or off the campus of an educational institution by one person alone or acting with others directed against a student that endangers the mental or physical health or safety of a student for the purpose of pledgeing, being initiated into, affiliating with, holding office in or maintaining membership in any organization whose members are or include students at an educational institution.

A person can commit a hazing offense not only by engaging in a hazing activity but also by soliciting, directing, encouraging, aiding or attempting to aid another in hazing; by intentionally, knowingly or recklessly allowing hazing to occur; or by failing to report, in writing to the Compliance & Judicial Affairs Office or another appropriate official of the College, first-hand knowledge that a hazing incident is planned or has occurred. The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosecution for hazing under this law. Under Texas law, hazing can subject a person to criminal penalties. For more information, please contact the Compliance & Judicial Affairs office by calling 281-478-2756 or emailing compliance@sjcd.edu.

**Campus Sexual Misconduct Policy**

San Jacinto College prohibits all employees and students from engaging in sexual harassment, sexual violence, and other behaviors of a sexual nature that are hostile, unwelcome, or intimidating. This prohibition encompasses conduct occurring on-campus or in connection with a College activity or program. Prohibited conduct that occurs off-campus is also encompassed by these rules if the conduct creates a sexually hostile environment on campus or in a college activity or program or adversely affects another student’s educational opportunities at the College.

Students who believe that they have been subjected to sexual misconduct (sexual assault, sexual harassment, dating violence, domestic violence, intimate partner violence or stalking) are encouraged...
to report their complaint to the San Jacinto College Campus Police Department (281-476-9128) as soon as possible after the incident occurs. Reports of sexual misconduct involving another student also may be directed to the Compliance & Judicial Affairs Office by submitting an Online Incident Report at www.sanjac.edu/incident-report or by calling 281-478-2756. Reports of sexual misconduct involving an employee should be reported to the Human Resources Department by calling 281-991-2648.

Existing disciplinary and complaint procedures, found in the Student Handbook, will serve as the framework for resolving allegations of sexual misconduct against students. Students found guilty of sexual misconduct will be subject to campus disciplinary sanctions. If an investigation substantiates that an employee engaged in sexual misconduct, the employee is subject to disciplinary action, up to and including termination, as provided in Board policy. In addition, any employee or student may face criminal prosecution for violations of applicable state and federal laws.

During an investigation or any disciplinary proceeding, the rights of both the respondent and the reporting party shall be respected, and the confidentiality of proceedings will be maintained to the extent permitted by law. The existence of the College’s policies and procedures is not intended to diminish or alter the rights that the respondent and reporting party have under civil law or the criminal law.

All sexual assault policies and complaint procedures can be found in the Code of Student Conduct and the Complaint Procedures sections of the Student Handbook.

In accordance with Texas House Bill No. 699 and the Campus SaVE Act/Clery Act, San Jacinto College provides an orientation/training on the College’s Campus Sexual Misconduct Policy for incoming freshman during their first term of enrollment.

**Definitions of Prohibited Behavior**

(Definitions and additional information can be found in the Student Handbook.)

**Sexual Assault:** Intentionally or knowingly causing physical sexual contact or sexual penetration of another person without that person’s consent. “Sexual contact” includes any touching of the anus, breast or any part of the genitals of another person with intent to arouse or gratify the sexual desire of any person. Sexual assault is without consent of the other person if the actor compels the other person to submit or participate by use of physical force or violence, or threat of force or violence, and the other person believes the actor has the present ability to execute the threat; or the other person cannot consent due to age, mental impairment or other circumstance.

**Sexual Harassment:** Sexual harassment includes, but is not limited to, unwelcome sexual advances, unwelcome requests for sexual favors, unwelcome verbal comments of a sexual nature and unwelcome physical contact or touching of a sexual nature. Sexual harassment is wrongful regardless of whether the parties are of the same sex or of the opposite sex.

**Dating Violence:** Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim. The existence of such a relationship shall be determined based on the reporting party’s statement and with consideration of the length of the relationship, the type of relationship and the frequency of interaction between the persons involved in the relationship. Dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse.

**Domestic Violence:** The term “domestic violence” refers to a pattern of abusive behavior between two individuals formerly or currently in an intimate relationship, including through marriage, cohabitation, dating, or within a familial or household arrangement. Abuse may be in the form of physical assault, sexual assault, bodily injury, emotional distress, physical endangerment, or when the imminent threat of any of these instances puts the victim in fear of their occurrence. The term encompasses acts committed by a current or former spouse or intimate partner of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse or intimate partner, and by a person similarly situated to a spouse or the victim under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred.

**Intimate Partner Violence:** Physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner.

**Stalking:** A course of conduct directed at a specific person that would cause a reasonable person to fear for the person’s safety or the safety of others or suffer substantial emotional dis-tress. “Course of conduct” means two or more acts, including, but not limited to, acts in which the stalker directly or indirectly, or through third parties, by any action, method, device or means.

**San Jacinto College Complaint Procedures for Students**

The College maintains several distinct procedures designed to provide efficiency and expertise in the resolution of student complaints. In situations in which a student alleges multiple, related complaints involving separate procedures (for example, a grade appeal and a discrimination complaint), the Administration reserves the right to process the complaints separately or to consolidate them. When complaints are consolidated, the Administration shall use the procedure that will provide the student with the maximum amount of process.

**Impartiality of College Officials**

To facilitate prompt responses to grievances or grievance appeals and to preclude conflicts of interest, the Dean of Compliance & Judicial Affairs, the Associate Vice Chancellor of Student Services, the Campus Provosts and/or the Chancellor may designate another College official to consider a grievance or grievance appeal and to render a decision.

**Retaliation Prohibited**

Every student has the right to file a complaint or to participate in an investigation without being subjected to retaliation. Retaliation is an adverse action taken by an employee or student against an individual who makes a good faith report of discrimination, harassment, or sexual misconduct or who participates in an investigation pertaining to a complaint of discrimination, harassment, or sexual misconduct. For an action or decision to be considered adverse, it must be materially adverse and be of the type that would dissuade a reasonable person from exercising his or her rights to file a complaint or to participate in an investigation. Unlawful retaliation does not include petty slights or annoyances. Any employee or student who engages in retaliation may be subject to disciplinary action.
Grade Appeals

Complaint Procedure 100

Grade determination and awarding of a final grade in a course is clearly the responsibility of the instructor. Final grade reports should be available to the student within a reasonable time following the end of the course, typically within seven days. When a student becomes aware of a final grade that is believed to be incorrect, the student may appeal the final grade received in the course. The student shall initiate the appeal process as soon as possible following the receipt or electronic posting of the grade. The appeal process shall be initiated no later than 30 days after the end of that semester and must be resolved within 120 days following the initiation of the appeal.

Students may not use this procedure to challenge the substance or content of an exam, test item, test answer, or assignment. At no step in the process may the instructor’s questions or individual test items to be scrutinized. Only course syllabus (e.g., grading system), and letter or numerical grades as recorded in the instructor’s grade book will be examined.

The procedures for appealing a grade shall be as follows:

1. Student meeting with instructor: The student and instructor shall discuss the grade that the student believes is incorrect. At this meeting, only the grades on tests, projects, reports, etc. and the grading system listed in the syllabus will be discussed and recalculated as necessary. Whenever possible, the matter should be resolved at this meeting. If the instructor cannot resolve the problem immediately, the student will be notified of the availability of a copy of the grade appeal procedures in the office of the appropriate dean. If, upon receipt of the instructor’s written decision, the student is dissatisfied with the decision, the student may request a meeting with the department chair to appeal the decision of the instructor. (Note: In the event there is no department chair, the student may request a meeting with the dean who will conduct the meeting in accordance with steps No. 1 and No. 2 of this procedure.) The student must make the appeal within five (5) working days after notification by the instructor.

2. Student meeting with Department Chair/Program Director: The department chair must arrange a meeting no more than five (5) working days after receiving a request from the student unless exceptional circumstances warrant additional time. This meeting will include the student, the instructor and the department chair. Providing sufficient evidence of discrepancies or errors in the grade will be the responsibility of the student. If insufficient evidence is offered, the appeal will be denied. The student will be given an opportunity to present his/her case. The instructor will be given a chance for rebuttal.

On hearing the evidence from both sides, the department chair will take one of the following actions:

a. If, in the opinion of the department chair, the student failed to provide sufficient evidence of discrepancies or errors in the grades, the student will be notified in writing that the appeal is denied. The department chair will inform the student of the right to appeal the decision and about the procedures for appeal. At the same time, the department chair will notify the instructor in writing of this decision. The notification must be given within five (5) working days of meeting.

b. If, in the opinion of the department chair, the student provided sufficient evidence of discrepancies or errors in the grades, the instructor will be notified within five (5) working days of the meeting. At the same time, the department chair will notify the student in writing of this decision.

The instructor will, in turn, inform the department chair in writing within five (5) working days whether he/she will change the grade. If the instructor changes the grade, the instructor notifies the student in writing and the matter is closed.

If the instructor chooses not to change the grade, the department chair will be notified of the decision in writing within five (5) working days after having received the recommendation from the department chair. Within five (5) working days after being informed of the instructor’s decision to deny the grade change, the department chair will notify the student that the appeal is denied and inform the student of further rights to appeal and the procedure for doing so. All time limits stated are in working days.

All time limits may be extended by mutual consent or by the dean due to exceptional circumstances.

3. Student Meeting with dean. Within five (5) working days after receiving notification from the department chair that the appeal has been denied, a student may request a meeting with the dean who will take either action A or action B as described in step No. 2 above. (Note: In the event there is no dean or in the event that the dean conducted the initial meeting, the student will proceed to Step 4.)

4. Student Meeting with Academic Appeals Committee. Within five (5) working days after receiving written notification from the dean that the appeal has been denied, a student appealing a grade in a course may request a hearing before an Academic Appeals Committee. This request will be in writing to the Provost. The committee will consist of one full-time instructor to be named by the student, one full-time instructor to be named by the instructor and one full-time instructor to be named by the Provost. The Provost will request that the student and instructor submit the name of their nominees within five (5) working days after notification of all parties involved. Upon receiving the names of those nominees and appointing a third instructor to the committee, the Provost will set the time, date and place of the closed hearing and notify all parties. This will be done within five (5) working days after having received the names of both nominees. A student may present written evidence relevant to the grade appeal and may be advised at the hearing by one or more persons of his/her own choice. The student may have a maximum of two (2) persons in the room at a time. The Academic Appeals Committee may request information from the instructor and/or other persons familiar with the matter.

Within five (5) working days after this hearing, the Academic Appeals Committee will notify the student, the instructor, and the Provost in writing of its findings:

1. A grade change is justified and will be made; or
2. A grade change is not justified and will not be made.

If the decision of the Academic Appeals Committee is to change the grade, the Provost will have five (5) working days to make the grade change. The decision of the Academic Appeals Committee will be final.

The same appeal process will be followed when the instructor is not accessible or no longer employed by San Jacinto College by excluding the step involving the instructor.
General Complaints

Complaint Procedure 200

200.1 Scope
San Jacinto College complies with the U.S. Department of Education’s “Program Integrity” regulations, which require each state to have a student complaint procedure in order for public and private higher education institutions to be eligible for federal Title IV funds. Current, former, and prospective students may initiate a complaint with the Texas Higher Education Coordinating Board, after exhausting the institution’s grievance/complaint process, by sending the required forms either by electronic mail to studentcomplaints@thecb.state.tx.us, or by mail to the Texas Higher Education Coordinating Board
Office of General Counsel
P.O. Box 12788, Austin, Texas 78711-2788

Facsimile transmissions of the forms are not accepted.

A general complaint is a College-related problem, decision or condition that a student believes to be unfair, inequitable or adversely affecting the student’s education at San Jacinto College or that affects the student’s ability to use College services and programs. A student may not use Procedure 200 to complain about decisions affecting other students or persons. Finally, Procedure 200 may not be used to address matters for which special procedures are published. In particular, this general procedure may not be used to address grade appeals; harassment and discrimination and sexual misconduct complaints under Complaint Procedure 300 or 400; traffic appeals; FERPA complaints (See Student Records policy); or student discipline complaints, hearings or appeals.

Barring exceptional and unforeseeable circumstances, students should file their complaints within 10 school days after the problem, decision or condition arose. Complaints filed more than 10 school days after the conclusion of the semester and the posting of the student’s final grades generally may not be accepted.

200.2 Steps
1. Students who wish to file a complaint should, when necessary, consult with an educational planner or counselor for guidance on how to identify the individuals to whom the student should direct the complaint under Step 2 or Step 3.
2. The student should first discuss the complaint with the College employee most directly responsible for the condition which brought about the complaint. Most matters will be resolved at this level.
3. If the discussion at Step 2 does not resolve the matter to the student’s satisfaction and the student wishes to pursue the matter, the student may discuss the matter with the next level of supervisory authority.
4. If the discussion at Step 3 still does not resolve the matter to the student’s satisfaction, the student may file a written complaint. The written complaint shall identify the requested remedy. If the general complaint is against another student or involves the application of a College policy or procedure, the student shall file the complaint with the Dean of Compliance & Judicial Affairs or Compliance Officer. The Dean of Compliance & Judicial Affairs or Compliance Officer will take appropriate action on matters within his or her jurisdiction or route the complaint to the appropriate senior administrator for action. If the general complaint is against a College employee, the Dean of Compliance & Judicial Affairs or Compliance Officer will forward the complaint to the employee relations department. The Dean and the Employee Relations department shall confer and determine an appropriate investigation plan. The official conducting the review or investigation shall prepare a written communication regarding the disposition of the complaint.
5. If the response at Step 4 does not resolve the matter to the student’s satisfaction, the student may seek further review by submitting a written request to the campus Provost or appropriate senior level administrator. The decision of the campus Provost or appropriate senior level administrator will be final.

Discrimination and Harassment Complaints

Complaint Procedure 300

300.1 General Statement of Purpose
It is the policy of San Jacinto College to provide an educational, employment and business environment free of discrimination based on race, creed, color, national origin, citizenship status, age, disability, pregnancy, religion, gender, sexual orientation, gender expression or identity, genetic information, marital status or veteran status. Trustees, administrators, faculty, staff and other agents of the College will not engage in conduct constituting unlawful harassment or discrimination. The College will promptly investigate all allegations of harassment and discrimination and take appropriate disciplinary action against individuals who engage in prohibited conduct. Disciplinary action may include dismissal of employees, expulsion of students and removal of visitors. The policy against discrimination applies to all programs and activities, including:

• Admission to programs of study
• Access to enrollment in courses
• Career placement services
• Counseling and guidance materials, tests and practices
• Technical education
• Physical education
• Competitive athletics
• Graduation requirements
• Student rules, regulations and benefits
• Treatment as a married and/or pregnant student
• Housing
• Financial assistance
• Health services
• School-sponsored extracurricular activities
• Other aid, benefits or services

These rules apply to harassment or discrimination that occurs in any program or activity under the substantial control of the College, whether the activity or program is on campus or off campus. Additionally, these rules apply when off-campus harassment or discrimination causes continuing effects on campus.

All administrators, faculty and staff are encouraged to promptly report incidents of discrimination, harassment, and violence. Additionally, the College has designated certain College employees as responsible officials who have mandatory reporting duties. The following employees...
have a duty to report alleged instances of unlawful discrimination or
harassment that come to their attention:

- Chancellor, the Deputy Chancellor and President, Vice Chancellors,
  Associate Vice Chancellors, Assistant Vice Chancellors, Vice
  Presidents, Provosts, and Deans
- Registrar
- Faculty and Department Chairs
- Compliance Officer
- Police Department personnel
- Counselors
- Risk Management personnel
- Human Resources personnel
- Athletics personnel
- Directors and Managers

The College has appointed a Title IX/Discrimination Prevention Team to
facilitate the College's compliance with state and federal laws prohibiting
discrimination. A list of the team is found in Section 400.2 of Complaint
Procedure 400.

300.2 Scope of this Procedure
This procedure applies to all harassment or discrimination complaints
based on a protected status except those involving sexual harassment,
sexual assault, domestic violence, dating violence or stalking. Complaints
involving sexual harassment, sexual assault, domestic violence,
dating violence or stalking are addressed in Complaint Procedure 400.
Discriminatory harassment is also a violation of the Code of Student
Conduct as referenced in section 3.2.3.

This procedure, however, does apply to sexual discrimination complaints,
such as a complaint alleging denial of admission into a program because
of gender. In the event that a sexual discrimination complaint overlaps
with a sexual harassment complaint, or in the event it is difficult to
determine whether a sexual discrimination complaint encompasses
sexual harassment, Procedure 400 will be used.

300.3 What is Discrimination?
 Discrimination is the act of treating similarly situated persons differently
based on their race, color, national origin, religion, sex, disability, age,
veteran or military status, genetic information or any other basis
protected by law.

For students, this prohibition applies to College operations and activities
such as admission, housing, discipline, counseling, scholarship and loan
programs, co-curricular experiences and athletics.

300.4 What is Discriminatory Harassment?
Discriminatory harassment is physical, verbal or nonverbal conduct
directed at a person because of his or her race, color, national origin, sex
(gender), religion, disability, age, veteran status, genetic information or
any other protected status and that is so severe, persistent or pervasive
that the conduct:

1. Affects a person's ability to participate in or benefit from an
   educational program or activity, or creates an intimidating,
threatening, hostile or offensive educational environment;
2. Has the purpose or effect of substantially or unreasonably interfering
   with the student's academic performance or an employee's work
   performance; or
3. Otherwise adversely affects a person's educational or employment
   opportunities.

Examples of prohibited harassment include, but are not limited to,
offensive or derogatory comments, jokes or slurs because of the
individual's protected status or because of the individual's need for an
accommodation based on disability or religion; actions that are designed
to humiliate or embarrass; physical aggression or assault; display of
graffiti or printed material promoting racial, ethnic or other negative
stereotypes; or other kinds of aggressive conduct such as theft or
damage to property when motivated by the individual's protected status.

300.5 Complaint Process
Students may use this procedure to file a complaint against another a
student, a College employee, College contractors or third parties who are
visiting the College or participating in a College activity.

A student may, at any time, personally approach the individual whose
conduct is offensive, unwelcome or intimidating and request that such
conduct stop. However, if this action is not feasible or unsuccessful, or
if a student feels uncomfortable taking this approach, the student may
seek an informal or formal resolution at any time. No student is ever
required to make a report to the person who is engaging in discrimination
or harassment.

A student may seek resolution or general information about this
complaint procedure by contacting any member of the Title IX/
Discrimination Prevention Team.

300.5.1 Formal Complaint Process
Although students may file a complaint at any time, the College
courages students to report their concerns as soon as possible after
the alleged incident(s) so that prompt action can be taken to investigate
and resolve the complaint. A delay in reporting may result in a loss
of evidence or witness availability. Students are encouraged to file
complaints during the same semester that the alleged incidents occurred
or within 30 days of the conclusion of the semester.

Content of complaint: Students are encouraged to submit written
complaints that describe all incident(s) or action(s) considered by the
reporting party to be harassing, discriminatory, or violent. Reporting
parties should provide the following information:

- Contact information, including address, telephone and email;
- Name of person(s) directly responsible for alleged violation(s);
- Date(s) and place(s) of alleged violations;
- Nature of alleged violation(s);
- Detailed description of the specific conduct that is the basis of
  alleged violation(s);
- Copies of documents, emails, text messages, photos or other
  physical evidence pertaining to the alleged violation(s);
- Names of any witnesses to alleged violation(s);
- Action requested to resolve the situation;
- Reporting party’s signature and date of filing; and
- Any other relevant information.

The student's failure to provide a written complaint or to provide the
information requested above may adversely impact of the College
to conduct a complete and thorough investigation and may limit the
College's ability to take appropriate corrective action.
Where to file the complaint: Complaints alleging misconduct by a student shall be filed with any member of the Title IX/Discrimination Prevention Team who addresses student concerns.

Complaints alleging misconduct by an employee or campus visitor shall be filed with any member of the Title IX/Discrimination Prevention Team who addresses employee concerns.

To ensure that all student complaints are properly processed, any College administrator who receives a complaint under this procedure shall promptly notify the appropriate Title IX Coordinator in writing.

Title IX/Discrimination Prevention Team:

**Associate Vice Chancellor of Student Services**
Joanna Zimmermann (students)—Co-Lead Title IX Coordinator
8060 Spencer Highway
Pasadena, Texas 77505
joanna.zimmermann@sjcd.edu
281-476-1863

**Vice President, Human Resources**
Sandra Ramirez (employees)—Co-Lead Title IX Coordinator
4620 Fairmont Parkway, Pasadena, Texas 77504
sandra.ramirez@sjcd.edu
281-991-2648

**Vice Chancellor, Strategic Initiatives, Workforce Development, Community Relations and Diversity**
Allatia Harris (equity in athletics)
8060 Spencer Hwy., Pasadena, TX 77505
allatia.harris@sjcd.edu
281-459-7140

**Director of Employee Relations**
Vickie Del Bello (employees)
4620 Fairmont Parkway
Pasadena, Texas 77504
vickie.delbello@sjcd.edu
281-998-6357

**Dean of Compliance & Judicial Affairs**
Clare Iannelli (students)
8060 Spencer Highway
Pasadena, Texas 77505
clare.iannelli@sjcd.edu
281-478-2756

**Compliance Officer**
Danessa Trahan (students)
8060 Spencer Highway
Pasadena, Texas 77505
danessa.trahan@sjcd.edu
281-478-2756

**Dean of Student Development—Central Campus**
Shelley Rinehart (students)
8060 Spencer Highway,
Pasadena, Texas 77505
shelley.rinehart@sjcd.edu
281-998-6150, ext. 1012

**Dean of Student Development—North Campus**
Tami Kelly (students)
5800 Uvalde Road
Houston, Texas 77049
tami.kelly@sjcd.edu
281-459-7653

**Dean of Student Development—South Campus**
Debbie Smith (students)
13735 Beamer Road
Houston, Texas 77089
deborah.smith@sjcd.edu
281-922-3455

**Provost - Central Campus**
Van Wigginton
8060 Spencer Highway,
Pasadena, Texas 77505
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281-542-2000

**Provost - North Campus**
William Raffetto
5800 Uvalde Road
Houston, Texas 77049
william.raffetto@sjcd.edu
281-459-7101

**Provost - South Campus**
Brenda Jones
13735 Beamer Road
Houston, Texas 77089
brenda.jones@sjcd.edu
281-922-3403

300.5.2 Processing the Complaint

The Title IX Coordinator or designee will evaluate the complaint to determine whether it is covered by this procedure. A formal investigation will be initiated if a complaint is within the scope of this policy and articulates sufficient specific facts, which if determined to be true, would support a finding that the College's policy was violated. The College may decline to process a complaint under a variety of circumstances, including

1. the complaint is vague and does not describe conduct covered by this procedure;
2. the student declines to cooperate in the College's investigation; or
3. the complaint has been withdrawn or the requested remedy has already been implemented or was offered and rejected.

If the College declines to process a complaint pursuant to this procedure, the College shall send the student a written notification explaining the reasons.

If the Compliance & Judicial Affairs office proceeds with a complaint investigation, the Title IX Coordinator or designee shall determine whether interim action is needed pending completion of an investigation (e.g., a no-contact order, temporary reassignment or suspension). The Title IX Coordinator or designee will assign an impartial investigator to investigate the complaint.

In cases in which the respondent is a student, the investigator will be the Dean of Compliance and Judicial Affairs, the Compliance Officer, or designee. In cases in which the respondent is an employee, the Employee Relations department will conduct the investigation and follow the appropriate employee-related complaint processes. In some instances, a
team from Compliance and Judicial Affairs and Employee Relations will conduct the investigation together.

The Title IX Coordinator or designee shall notify the reporting party and the respondent of the name and contact information of the investigator(s). The respondent shall receive written notice of the allegations and shall be informed of his or her right to submit a written response to the allegations within 10 school days, unless unusual circumstances warrant additional time. The written notice shall inform the respondent that retaliation against the reporting party is prohibited and may result in disciplinary action.

300.5.3 Investigating the Complaint

Barring unusual circumstances (e.g., multiple reporting parties, a complaint filed the day before the winter break), the investigation ordinarily will be completed within 60 calendar days. An investigation shall commence even if a law enforcement agency is conducting a separate criminal investigation against the respondent. However, the College’s investigation may be temporarily delayed when requested by police investigators or the District Attorney’s Office. If the College’s investigation is temporarily delayed due to a pending criminal investigation, the reporting party and respondent will be notified.

The investigator shall interview the reporting party, the respondent and other individuals determined by the investigator to possess relevant information. The reporting party and the respondent each will be permitted to provide documentation or other tangible evidence to the investigator.

During meetings pertaining to the investigation and complaint process, the reporting party and the respondent may be represented or accompanied by an advisor. Advisors, however, may not actively participate in meetings or interview witnesses.

The investigator shall prepare a written report that summarizes the findings and states whether a preponderance of the evidence establishes a violation of the College’s policies. The investigator will consider the totality of circumstances, including the context and duration of the conduct and its severity. Facts will be considered on the basis of what is reasonable to persons of ordinary sensitivity.

If the respondent is a student, the preliminary findings shall be submitted to the Associate Vice Chancellor of Student Services or designee. If the respondent is an employee or visitor, the preliminary findings shall be submitted to the appropriate leader, which ordinarily will be the Provost, Vice President of Human Resources, Associate Vice Chancellor or other Vice President. If a complaint is directed at an administrator who would otherwise act on the complaint, then the function assigned to that person will be assigned to another person.

The Associate Vice Chancellor will permit the respondent and the reporting party to review the preliminary findings. Student identifiable information, if confidential by law, will be redacted. The respondent and the reporting party will each have 10 working days to provide comments and suggested corrections to the Associate Vice Chancellor. After receiving the comments from the parties (or if no comments are submitted), the Associate Vice Chancellor will confer with the investigator to discuss the findings and to review the investigation record. The Associate Vice Chancellor shall determine whether additional investigation is needed; whether to dismiss the complaint due to insufficient evidence; or whether to proceed with a disciplinary consequence or other corrective action. The action shall be reasonably calculated to prevent a reoccurrence of the misconduct and/or to ameliorate its impact. The Compliance and Judicial Affairs office’s final determination shall be sent to the respondent, the reporting party, and the Title IX Coordinator. The final determination may be redacted to protect student information that is confidential by law under the Family Educational Rights & Privacy Act. All deadlines in this procedure may be extended by mutual agreement or for good cause.

300.6 Review and Appeals

If the investigation does not result in the assignment of disciplinary consequences against the respondent, the reporting party may submit a written appeal to the Provost or designee. The Provost or designee shall provide written notice to the respondent of the appeal. The Provost or designee shall review the record and issue a written response within 20 school days. A copy of the response shall be provided to both parties.

If the respondent is a student and is proposed for major discipline (expulsion, a suspension exceeding five days or revocation or withdrawal of a degree), he or she may request a hearing to challenge the charge and the sanction under Section 4.8 of the Student Code of Conduct. If the proposed discipline involves a consequence that is less than expulsion, a suspension exceeding five days or revocation or withdrawal of a degree, the student may request a hearing under Section 4.9 of the Student Code of Conduct. If the student desires to challenge the sanction but not the charge, then the student may seek review by filing a request with the Provost or designee. The Provost or designee shall review the record and issue a written response within 20 school days. A copy of the response shall be provided to both parties.

If the respondent is an employee and is assigned a disciplinary consequence, he or she may seek review in accordance with the employment policies of the College.

300.7 Retaliation Prohibited

Every student has the right to file a complaint or to participate in an investigation without being subjected to retaliation. Retaliation is an adverse action taken by an employee or student against an individual who makes a good faith report of discrimination, harassment or sexual misconduct or who participates in an investigation pertaining to a complaint of discrimination, harassment or sexual misconduct. For an action or decision to be considered adverse, it must be materially adverse and be of the type that would dissuade a reasonable person from exercising his or her rights to file a complaint or to participate in an investigation. Unlawful retaliation does not include petty slights or annoyances. Any employee or student who engages in retaliation may be subject to disciplinary action.

300.8 Office for Civil Rights

Students who have experienced discrimination or harassment based on a protected status may file a complaint with the U.S. Department of Education. (www2.ed.gov/about/offices/list/ocr/docs/howto.html (http://www2.ed.gov/about/offices/list/ocr/docs/howto.html))

Veteran Information

Virtually all academic, vocational and technical courses leading to a degree or certificate at San Jacinto College are approved for veteran training. There is a Veteran Services department located on San Jacinto College’s Central, North and South Campuses.

Students who expect to receive veteran education benefits while attending San Jacinto College should contact the Veteran Services department located on their desired campus.
In certain cases, dependents of veterans may be eligible to receive VA benefits. Students who expect to receive veteran education benefits while attending San Jacinto College should contact the Veteran Services department located on their desired campus.

Disabled veterans who plan to receive the Vocational Rehabilitation education benefit should contact the counseling and training office at the VA Regional Office in Houston at 713.383.1985, and then contact the Veteran Services department located on the campus they will attend.

For more information on VA eligibility requirements, visit www.gibill.va.gov (http://www.gibill.va.gov) or the Veteran Services department website at www.sanjac.edu/veterans.

**Steps in Applying for Veteran Benefits**

Students applying for federal VA education benefits should submit the following documents to the Veteran Services department located on their desired campus:

2. Submit the DD-214 member 4, 2 or 7. DD-214 member 1 is not acceptable.
4. Submit a copy of the Certificate of Eligibility (COE).

Veterans who have previously used VA educational benefits at a different college or university should:

2. Submit the DD-214 member 4, 2 or 7. DD-214 member 1 is not acceptable.
4. Submit a copy of the Certificate of Eligibility (COE).

All documents should be taken to the VSSC located on the campus.

**Course Withdrawal**

The VA does not allow automatic payment of benefits for a grade of W, I or FX. Incomplete grades will be reported to the VA as non-punitive. Students who drop courses may have to pay back money received for such courses.

The VA will allow payment only in cases of mitigating circumstances and students will be required to explain in writing to the VA the reason for their withdrawal from courses. There is a one-time exclusion for dropping up to six credit hours.

Before withdrawing from any course, students must notify the campus VA Certifying Official in order to have their VA holds removed. The student is responsible for withdrawing from the course(s) by following the College's standard withdrawal procedures. For students who need to drop a college preparatory course(s), approval must be granted by the Veteran Services department. Students must also notify their VA representatives once the class(es) have been dropped.

**Repeating Courses**

Students using VA educational benefits or Hazlewood may not retake a course in which a passing grade or a temporary grade of I has been awarded. It is the responsibility of the student to know which course(s) have been completed.

Transfer students should submit all academic transcripts from both accredited and non-accredited schools. This also includes military transcripts. Transcripts should be received and evaluated prior to selecting courses, when possible. The College is required to notify the VA of any course duplications, and appropriate changes will be made when a student has taken a class that has been deemed successfully completed.

**Program Requirements**

Federal and state regulations require that persons who have declared a degree plan take courses leading toward that objective. Any deviation from the approved program cannot be certified for VA benefits or Hazlewood benefits. Students should request a change of program before enrolling for courses outside the approved program. Electives not suggested in the catalog should be approved by the campus VA Certifying Official. Most veterans are exempt from college preparatory classes; however, if veterans want to be certified for college preparatory course work, they must show a need by taking a placement exam.

**Tutoring**

All students using VA educational benefits may be eligible for tutorial assistance paid by VA. Free tutoring is available at the Student Success Centers located at Central, North and South Campuses. Students needing extra tutoring should contact the College Veteran Services department located on their campus for additional information.

**Federal and State Academic Standards of Progress (Part 6)**

The Department of Veterans Affairs requires that a student make satisfactory academic progress to be eligible for VA educational benefits.

VA students on academic probation and suspension will be reported to the Department of Veterans Affairs.

All students receiving VA educational benefits are subject to the academic conditions under the Academic Probation and Suspension Table located in the catalog under Student Grades and Records.

**Hazlewood Act**

An act of the Texas Legislature known as the Hazlewood Exemption Act provides the following: All veterans who, at the time of entry into the U.S. Armed Forces were Texas residents, designated Texas as home of record or entered service in Texas and who were honorably discharged or discharged under honorable conditions after serving on active duty (excluding training time) for more than 181 days are exempt from paying tuition and certain fees.

The Hazlewood Act also allows veterans to use other federal aid in conjunction with Hazlewood benefits. An eligible person is limited to a maximum of 150 credit hours attempted. Students who are in default on
an educational loan guaranteed by the state of Texas are not eligible to receive Hazlewood benefits. In addition, students who are claiming the Hazlewood exemption are required to follow Financial Aid’s minimum GPA and excessive hour criteria. Satisfactory Academic progress is a 2.0 Grade Point Average and no more than 90 overall hours. Students who do not meet the minimum satisfactory academic progress standards are encouraged to apply for a Hazelwood appeal. Students eligible for Hazlewood benefits must meet the following academic requirements:

1. **Grade Point Average (GPA) Component**
   San Jacinto College uses the 4.0 grade point average system and numerical code:
   
<table>
<thead>
<tr>
<th>GPA</th>
<th>Numerical Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>A</td>
</tr>
<tr>
<td>3.0</td>
<td>B</td>
</tr>
<tr>
<td>2.0</td>
<td>C</td>
</tr>
<tr>
<td>1.0</td>
<td>D</td>
</tr>
<tr>
<td>0.0</td>
<td>F</td>
</tr>
</tbody>
</table>

   A student is expected to maintain a minimum cumulative GPA of 2.0 based upon the aggregate number of hours attempted at San Jacinto College.

2. **Time Frame Component**
   A student receiving the Hazlewood exemption will be expected to complete his/her San Jacinto College educational objective or course of study within the first 90 hours attempted.

   Grades of F, FX, I, NG, W, repeated courses are counted in the aggregate total number of hours attempted. Students will not receive exemption if the class has previously been passed unless the program of study requires students to take the course more than twice.

### Required Documents

To comply with the requirements of the Texas Veterans Commission, during or before registration, veterans or qualifying dependents must present six documents for the files at San Jacinto College:

**Veteran required Hazelwood documents:**

1. The member 4 copy of DD-214 (separation papers). DD214-member 1 is not a valid DD-214 for use of educational benefits.
2. Provide proof of eligibility or ineligibility for Chapter 33 from VA office in Muskogee, OK, if the veteran served after 09/11. In the event the veteran is eligible for Chapter 33, the cost of enrollment for the term may not exceed the value of Hazlewood (COE is required). Please request an education benefits letter by calling 1-888-442-4551
4. Students must provide a copy of their Hazlewood Online Database Report. https://hazlewood.tvc.texas.gov/students/.

### Transferability of Benefits (Legacy):

Eligible veterans may assign unused hours to a child under certain conditions. The following documents are required.

1. The veteran’s member 4 copy of DD-214 (separation papers). DD214-member 1 is not a valid DD-214 for use of Educational Benefits.
2. Copies of birth certificate, marriage certificates or tax returns may be requested.
4. Please provide all transcripts from any previously attending institutions.
5. Students must provide a copy of their Hazlewood Online Database Report. https://hazlewood.tvc.texas.gov/students/.

### Transfer Credit—United States Military

San Jacinto College may give undergraduate credit for demonstrated proficiency in areas related to college-level courses completed while in the United States military. The Defense Activity for Nontraditional Education Support (DANTES) and the Office of Education Credit and Credentials of the American Council on Education (ACE) will be the sources used to determine proficiency. In assigning credits of this nature, the recommendations of the American Council on Education (ACE) will be used as guidelines.

A maximum of 15 credit hours of course work from official military transcripts and two credit hours of PHED activity courses may be earned and applied toward a degree or certificate in this nontraditional manner. Only the courses that apply to the student’s major and used for graduation will be evaluated and assigned credit. The credit will be evaluated as transfer work and will not appear on the San Jacinto College transcript. The courses will be assigned the grade of “CR” indicating the “default loan” clause will be verified by the school. Please contact your campus Veteran Services department for more information.

**Children and Spouses required Hazelwood documents:**

1. The member 4 copy of DD-214 (separation papers). DD214-member 1 is not a valid DD-214 for use of Educational Benefits.
2. A letter from the Department of Veterans Affairs office stating the parent or spouse died as a result of service-related injuries or illness, is missing in action or became totally disabled for purposes of employability as a service-related injury or illness.
3. Provide proof of eligibility or ineligibility for Chapter 33 from VA office in Muskogee, OK, if the veteran served after 09/11. In the event the veteran is eligible for Chapter 33, the cost of enrollment for the term may not exceed the value of Hazlewood (COE is required). Please request an education benefits letter by calling 1-888-442-4551
5. Students must provide a copy of their Hazlewood Online Database Report. https://hazlewood.tvc.texas.gov/students/.

### Note:
Veterans may use the Hazlewood Exemption in conjunction with other VA education benefits and Pell Grant, if eligible. However, compliance with
credit. These grades will not calculate in the overall GPA of the student but the credit hours will count in the total hours for financial aid awards.

Any student wishing to earn credit for military experience must submit official transcripts. Students must have official transcripts mailed to the institution from the appropriate office depending on the student's branch of service.

The Joint Services Transcript can supply military transcripts for all branches of service except the Air Force. These can be sent electronically to San Jacinto College and in most cases are available within 7-10 business days. To request transcripts, log into https://jst.doded.mil/official.html.

**CLEP** - For more information on CLEP examinations

**Community College of the Air Force (CAF)** (accredited and all college-level credits will be accepted)
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ACCOUNTING (ACCT)

ACCT 2301  Principles of Financial Accounting  3 Credits  (3 Lec, 0 Lab)
This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS).
Prerequisite(s): Reading level 7, Math Level 9
Course Type: Academic

ACCT 2302  Principles of Managerial Accounting  3 Credits  (3 Lec, 0 Lab)
This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation.
Prerequisite(s): ACCT 2301 – Principles of Financial Accounting
Course Type: Academic
ACCOUNTING (ACNT)

ACNT 1303 Introduction to Accounting I 3 Credits (3 Lec, 0 Lab)
This course focuses on analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis is on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. (ACNT 1303 may not count for degree or certificate purposes if the student receives credit for ACCT 2301.) ACNT 1303 and 1304 will not satisfy the business administration transfer program degree accounting requirements.
Course Type: Technical

ACNT 1304 Introduction to Accounting II 3 Credits (3 Lec, 0 Lab)
This course focuses on accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment.
Prerequisite(s): ACNT 1303 (ACNT 1304 may not count for degree or certificate purposes if the student receives credit for ACCT 2301.) ACNT 1303 and 1304 will not satisfy the business administration transfer program degree accounting requirements.
Course Type: Technical

ACNT 1311 Introduction to Computerized Accounting 3 Credits (3 Lec, 0 Lab)
This course provides an introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. It is recommended that students have prior knowledge and/or experience in accounting.
Course Type: Technical

ACNT 1313 Computerized Accounting Applications 3 Credits (3 Lec, 0 Lab)
This course makes use of the computer to develop and maintain accounting records and to process common business applications for managerial decision-making.
Prerequisite(s): ACNT 1311
Course Type: Technical

ACNT 1329 Payroll and Business Tax Accounting 3 Credits (3 Lec, 1 Lab)
This course is a study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment.
Prerequisite(s): Reading level 4
Course Type: Technical

ACNT 1331 Federal Income Tax: Individual 3 Credits (3 Lec, 0 Lab)
This course is a study of the federal tax law for preparation of individual income tax returns.
Prerequisite(s): Reading level 4
Course Type: Technical

ACNT 2302 Accounting Capstone 3 Credits (3 Lec, 0 Lab)
This course allows students to apply broad knowledge of the accounting profession through discipline specific projects involving the integration of individuals and teams performing activities to simulate workplace situations.
Course Type: Technical

ACNT 2303 Intermediate Accounting I 3 Credits (3 Lec, 0 Lab)
This course is an analysis of generally accepted accounting principles, concepts, and theory underlying the preparation of financial statements.
Prerequisite(s): ACCT 2301
Course Type: Technical

ACNT 2304 Intermediate Accounting II 3 Credits (3 Lec, 0 Lab)
This course is a continued in-depth analysis of generally accepted accounting principles, underlying the preparation of financial statements including comparative analysis and statement of cash flows.
Prerequisite(s): ACCT 2301
Course Type: Technical

ACNT 2309 Cost Accounting 3 Credits (3 Lec, 0 Lab)
This course focuses on budgeting, cost analysis, and cost control systems, using traditional and contemporary costing methods and theories in decision making.
Prerequisite(s): ACCT 2302 or equivalent
Course Type: Technical

ACNT 2345 Technical Writing for Accountants 3 Credits (3 Lec, 0 Lab)
This course will examine and apply effective written business and accounting communications. This course may also be offered for qualifying education credit for CPA examinations by Texas community colleges that meet Texas State Board of Public Accountancy standards.
Course Type: Technical

ACNT 2366 Practicum (or Field Experience) - Accounting 3 Credits (0 Lec, 21 Lab)
This course is practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): ACCT 2301, or Department Chair approval
Course Type: Technical

ACNT 2367 Practicum (or Field Experience) - Accounting 3 Credits (0 Lec, 21 Lab)
This course is practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): ACCT 2301, or Department Chair approval
Course Type: Technical
ACNT 39004 Retirement Planning Today 0 Credits
ACNT 39005 Socially Responsib Investing 0.8 Credits
ACNT 41000 Bookkeeping 4.8-6.4 Credits
ACNT 41001 Beginning Bookkeeping 1.6-4.8 Credits
ACNT 41002 Beginning Accounting 1.6-4.8 Credits
ACNT 41003 Introduction to Accounting I 4.8-9.6 Credits
ACNT 41004 Introduction to Accounting II 4.8-9.6 Credits
ACNT 41010 Introduction to Computerized A 1.6-3.2 Credits
ACNT 41015 Payroll Accounting 0.7-3.2 Credits
ACNT 41019 Introduction to Appraisal 1.6-3.2 Credits
ACNT 41020 Business Taxation 1.6-4.8 Credits
ACNT 41025 Principles of Accounting I 4.8-9.6 Credits
ACNT 41026 Principles of Accounting II 4.8-9.6 Credits
ACNT 41029 Payroll and Business Tax Accou 4.8-9.6 Credits
ACNT 41031 Federal Income Tax: Individua 4.8-9.6 Credits
ACNT 41041 Intermediate Accounting 1.6-4.8 Credits
ACNT 41042 Intermediate Bookkeeping 1.6-4.8 Credits
ACNT 41043 Intermediate Computerized Acco 1.6-3.2 Credits
ACNT 41044 Accounting 3.2-9.6 Credits
ACNT 41047 Federal Income Tax for Partner 4.8-4.8 Credits
ACNT 41050 The Texas Property Tax System 1.6-3.2 Credits
ACNT 41051 Property Tax Assessment 1.6-3.2 Credits
ACNT 41052 Property Tax Law 1.6-3.2 Credits
ACNT 41053 Property Tax Collections 1.6-3.2 Credits
ACNT 41054 Computerized Accounting 4.8-9.6 Credits
ACNT 41091 Special Topics in Accounting 0.7-11.2 Credits
ACNT 41092 Special Topics in Accounting T 0.7-11.2 Credits
ACNT 41093 Special Topics in Accounting 0.7-11.2 Credits
ACNT 41094 Special Topics in Taxation 0.7-11.2 Credits
ACNT 42001 Accounting Technician Capstone 4.8-9.6 Credits
ACNT 42002 Accounting Capstone 4.8-9.6 Credits
ACNT 42003 Intermediate Accounting I 4.8-9.6 Credits
ACNT 42009 Cost Accounting 4.8-9.6 Credits
ACNT 42011 Managerial Accounting 4.8-6.4 Credits
ACNT 42030 Governmental and Not-for-Profi 4.8-6.4 Credits
ACNT 42032 Accounting Information Systems 4.8-9.6 Credits
ACNT 42033 Advanced Computerized Accounti 1.6-3.2 Credits
ACNT 42034 Advanced Accounting 4.8-6.4 Credits
ACNT 42035 Advanced Bookkeeping 1.6-4.8 Credits
ACNT 42037 Advanced Property Tax Collecti 1.6-3.2 Credits
ACNT 42041 Appraisal of Personal Property 1.6-3.2 Credits
ACNT 42043 Tax Preparation Update 0.7-3.2 Credits
ACNT 42044 Accounts Payable with Computer 1.6-3.2 Credits
ACNT 42045 Accounts Receivable with Compu 1.6-3.2 Credits
ACNT 55000 Principles of Financial Accounting 7.2 Credits
Prerequisite(s): Reading level 7, Math Level 9 Note: Additional distance
ACNT 55001 Principles of Managerial Accounting 7.2 Credits
Prerequisite(s): ACCT 2301 This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity’s accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. (ACCT 2302)

ACNT 55002 Introduction to Accounting I 4.8 Credits
A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. (ACNT 1303)

ACNT 55003 Federal Income Tax Accounting 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. Learn to prepare your individual income taxes using the accounting methods described in this training course. Study the tax laws as implemented by the Internal Revenue Service to provide a working knowledge of preparing taxes for the individual. (ACNT 1331)

ACNT 55004 Intermediate Accounting I 4.8 Credits
Analyze the generally accepted accounting principles, concepts, and theories underlying the preparation of financial statements. (ACNT 2303)

ACNT 55005 Introduction to Computerized Accounting 4.8 Credits
Prerequisite(s): ACNT 1003 Note: Textbook required. Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This course examines the program parameters, maximum accounts, and company's user specified accounts. In addition, we will look at department jobs, number of open months, maximum fiscal periods, program control, error handling, automatic budget updates, reversing entries, recurring entries, flexible month ends and user specified growth rates. (ACNT 1311)

ACNT 55007 Introduction to Accounting II 4.8 Credits
A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment. (ACNT 1304)

ACNT 55008 Payroll/Business Tax Accounting 4.8 Credits
Prerequisite(s): None Note: Textbook required A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. (ACNT 1329)

ACNT 55009 SAP Supply Chain Overview 0.8 Credits
This one-day hands-on computer class utilizes SAP technology and covers the fundamental elements of the procurement process. Topics include procurement, inventory management, purchase orders, purchase requisitions, bidding, accounts payable and receivable.

ACNT 55010 Automated Accounting 7.6 Credits
This course will emphasize fundamental accounting concepts, practical and computerized procedures used in processing common business applications with focus on the general ledger. Payroll, inventory control, depreciation, petty cash and voucher management in both manual and computerized systems will be covered. Computerized accounting software is used to solve accounting problems.
ACNT 55011 Bookkeeping Essentials 4.8 Credits  
Learn to compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records.

ACNT 55012 QuickBooks - Basic Skills 3.2 Credits  
Prerequisite(s): Basic computer skills. Note: Textbook is required; flash drive is recommended. Become productive with QuickBooks as you learn to create a company and develop its chart of accounts. Learn banking procedures, how to track customers, vendors, bills, invoices, inventory, employees, payroll and finish by learning to run reports and create graphs.

ACNT 55013 QuickBooks - Your Business Solution 0.7 Credits  
This extremely condensed basic class highlights major areas of QuickBooks including company setup, income reporting, paying expenses, setting up payroll and reporting.

ACNT 55014 QuickBooks - Your Company Setup 0.7 Credits  
Prerequisite(s): Basic computer skills. Note: Textbook required, flash drive required. Take a day to learn to set up your company, your chart of accounts and your company payroll the correct way. You may bring your laptop in with your software already loaded and set up your company using your own data. Or you may practice setting up a company in the classroom using lab computers.

ACNT 55015 QuickBooks Financials 0.7 Credits  
Learn to perform banking transactions and cash and credit sales. Properly pay bills against and with inventory. Learn to track the sales tax you collect and to track the vendors and customers that are vital to your business. All in one day!

ACNT 55016 Basic Bookkeeping 1.5 Credits  
Learn to compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records.

ACNT 55017 QuickBooks Advanced 3.2 Credits  
Prerequisite(s): QuickBooks Basic Skills or equivalent knowledge. Note: Textbook is required, flash drive is recommended. In this advanced course, you will expand your reporting capability as you learn how to analyze financial data, preset reports and graphs. You will learn to track and pay sale tax, setup and run payroll, create and write payroll checks, practice paying payroll taxes. You will create estimates and learn how to invoice from estimates. You will also learn how to setup the software to track time and mileage.

ACNT 55018 Computerized Bookkeeping 5.5 Credits  
Learn procedures to complete a computerized accounting cycle; perform installation and start-up procedures; journal entries; print reports and financial statements. This class highlights major areas of QuickBooks including company setup, income reporting, paying expenses, setting up payroll and reporting.

ACNT 55019 Bookkeeping Fundamentals 6.9 Credits  
Learn to compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. This course covers the knowledge, skills and abilities tested on the Fundamental Payroll Certification (FPC) exam offered by the American Payroll Association (APA).

ACNT 55020 Payroll Fundamentals 4.8 Credits  
A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. This course also includes content for the Fundamental Payroll Certification Exam.

ACNT 55021 QuickBooks for the Payroll Professionals 1.2 Credits  
In this course, learners will review QuickBooks basics and then learn to setup and run payroll, create and write payroll checks, practice paying payroll taxes.

ACNT 55022 Cost Estimating 1.6 Credits  
This course covers the primary methods for cost estimation needed in systems development, including line item estimation, parametric estimation, level-of-effort, front- and rear-loaded estimation, and probabilistic loading.

ACNT 55023 Fundamental Payroll Certification Exam Prep 4.2 Credits  
Building on a quick review of the basics of accounting that include creating journal entries, inputting into the general ledger and cost distribution systems, and creating analytical reports, this course provides a study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a computerized environment. Designed to prepare participants for the Fundamental Payroll Certification (FPC) exam, participants will be expected to acquire additional study materials from the US Department of Labor and Internal Revenue Service utilizing a variety of resources.

ACNT 55024 Fundamentals of Payroll Accounting 11.2 Credits  
This course is a study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Beginning with a review of basic accounting principles, it covers the knowledge, skills and abilities tested on the Fundamental Payroll Certification (FPC) exam offered by the American Payroll Association (APA). Learners will review QuickBooks basics and then learn to setup and run payroll, create and write payroll checks, practice paying payroll taxes.

ACNT 55025 Payroll & Business Tax Fundamentals 4.8 Credits  
In this course learners will calculate employee payroll, employer related taxes and prepare related tax forms; and maintain payroll records required under current laws.

ACNT 55026 FPC Exam Fast Track Review 1.4 Credits  
Designed to prepare participants for the Fundamental Payroll Certification (FPC) exam, participants may be expected to acquire study materials from the US Department of Labor, Internal Revenue Service, and other resources.

ACNT 55027 Fundamentals of Payroll Certification Exam Review 3.2 Credits  
Designed to prepare participants for the Fundamental Payroll Certification (FPC) exam, participants may be expected to acquire study materials from the U.S. Department of Labor, Internal Revenue Service and other resources.

ACNT 55028 Payroll Specialist 7.5 Credits  
This program provides the basics of the accounting cycle from the source documents to the post-closing documents. Using a workbook, learners will have the opportunity to analyze, record, journalize, post, etc. for a fictitious business. Specific knowledge, skills, and abilities required for the Fundamental Payroll Certification (FPC) exam offered by the American Payroll Association (APA) will also be covered.
ACNT 55029 Essential SAP Skills 4.8 Credits
Learn the basics of the SAP system with hands-on exercises. Learn how to navigate, search, print and get help in SAP. Work with master data and transactions. Get an introduction to configuration. Learn basic and advanced reporting skills. After you have completed this course you will be comfortable working with the basics of the SAP system.

ACNT 55030 CPP Mastery Exam Prep 3.2 Credits
Designed to prepare participants for the CPP Mastery exam, participants may be expected to acquire study materials from the US Department of Labor, Internal Revenue Service, and other resources. Materials will be provided.

ACNT 55031 CAP Exam Review 2.8 Credits
The Certified Administrative Professional rating is the industry recognized standard of proficiency. Be a pro-active leader in your career by preparing for and taking the CAP Exam. This course is designed to provide a review of the skills required to successfully complete the CAP Exam as provided by the International Association for Administrative Professionals (IAAP). Materials provided

ACNT 55032 SAP Financial Accounting Basics 4.8 Credits
Prerequisite(s): Essential SAP Skills or equivalent knowledge Note: All lessons and materials are online. You will have access to the materials after the class is over for an extended period of time. In this course you will be introduced to the SAP Financial Accounting process. You will learn how to perform General Ledger accounting tasks and properly apply Accounts Receivable/Payable components. Learn to run important financial reports such as Balance Sheets, Profit Loss and Cash Flow. Learn how to work with vendor records, balances and line items. Post, search and display vendor invoices, outgoing payments and process automatic payment runs. Run important financial reports such as A/P Info systems, vendor balances, and vendor lists. Finally, you will learn to perform asset accounting tasks such as year-end closing, work with assets, transactions and depreciation, acquisitions, retirements, and transfers. Run important asset reports such as Asset Balances, Total Depreciation and Asset History Sheet. All these components will include hands on exercises.

ACNT 55033 Fundamentals of Finance and Accounting for Nonfinancial Managers 1.4 Credits
In today’s business world, when every manager is held accountable for the bottom line, you have to be finance savvy. Offering an accessible overview of finance for nonfinancial managers, this seminar features exactly what you need to further your career and build your future. From accruals to write-offs to receivables and payables, this workshop shows nonfinancial managers the concepts, tools, and techniques that can help make each decision pay off on the job and on the bottom line.

ACNT 55034 Fundamental Payroll & Mastery Exam Prep 3.2 Credits
The PayTrain Fundamentals course teaches the fundamental payroll calculations and applications providing students with the basic knowledge and skills required to maintain payroll compliance and prevent costly penalties. This course is ideal for new payroll professionals, those who support the payroll industry, and those who are preparing for FPC/CPP (Mastery) certification.

ACNT 55035 Accounting Specialist Fast Track Certificate Program 5.6 Credits
Prerequisite(s): High school/GED and proficiency in reading, writing, mathematics and speak English. Note: Textbook is required. This course is a study of basic accounting cycle from the source documents to the post-closing documents. Using a workbook, learners will have the opportunity to analyze, record, journalize, post, etc. for a fictitious business. Learners will acquire the understanding of banking procedures and control of cash. Students will also be exposed to the payroll process by calculating, paying, recording, and reporting payroll and payroll taxes.

ACNT 55036 Payroll Specialist Fast Track Certificate Program 3.2 Credits
This program provides the basics of the accounting cycle from the source documents to the post-closing documents. Using a workbook, learners will have the opportunity to analyze, record, journalize, post, etc. for a fictitious business. Specific knowledge, skills, and abilities required for the Fundamental Payroll Certification (FPC) exam offered by the American Payroll Association (APA) will also be covered.

ACNT 55037 Basic Accounting and Finance 0.8 Credits
Prerequisite(s): None A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. Define accounting terminology; analyze and record business transactions in a manual and computerized environment; complete the accounting cycle; prepare financial statements; apply accounting concepts related to cash and payroll; prepare bank reconciliations; and correct accounting errors.

ACNT 55038 QuickBooks Complete w/Excel 8 Credits
This course is designed for the student with basic Excel skills and/or basic accounting skills. It offers a full course in Excel Intermediate skills and includes coverage of basic accounting concepts. You will learn to manage Excel workbooks, data, tables, special charts and PivotTables. The step-by-step approach to learning QuickBooks is used as the lessons begins as a service company and then moves to a service and merchandise company. There are lots of repetition exercises in performing QuickBooks tasks allowing you to learn and master new skills such as working with customers and vendors, banking, creating a company file, managing inventory, working with balance sheets, performing payroll, job costing, reporting and closing the books.

ACNT 59007 Accounting Fundament. II (Net) 2.4 Credits
AGRICULTURE (AGRI)

AGRI 1131 The Agricultural Industry 1 Credit (1 Lec, 0 Lab)
This course is an overview of agriculture and the American agricultural system, including an examination of career opportunities and requirements.
Prerequisite(s): Reading level 6
Course Type: Academic

AGRI 1309 Computer in Agriculture 3 Credits (3 Lec, 1 Lab)
This course focuses on a survey of the use of computers in agricultural applications.
Prerequisite(s): Reading level 6
Course Type: Academic

AGRI 1315 Horticulture 3 Credits (3 Lec, 0 Lab)
This course covers the structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management.
Prerequisite(s): Reading level 6
Course Type: Academic

AGRI 1319 Introductory Animal Science 3 Credits (3 Lec, 0 Lab)
This course covers scientific animal production and the importance of livestock and meat industries. Selection, reproduction, nutrition, management, and marketing of livestock.
Prerequisite(s): Reading level 6
Course Type: Academic

AGRI 1407 Agronomy 4 Credits (3 Lec, 2 Lab)
This course covers principles and practices in the development, production, and management of field crops including growth and development, climate, plant requirements, pest management, and production methods.
Prerequisite(s): Reading level 6
Course Type: Academic

AGRI 2317 Introduction to Agricultural Economics 3 Credits (3 Lec, 0 Lab)
This course covers the fundamental economic principles and their applications in the agricultural industry.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Academic

AGRI 2321 Livestock Evaluation I 3 Credits (3 Lec, 0 Lab)
This course focuses on the evaluation and grading of market cattle, swine, sheep, and goats and their carcasses and wholesale cuts. Emphasis will be placed on value determination. Selection and evaluation of breeding cattle, sheep, swine, and goats with emphasis on economically important traits.
Prerequisite(s): Reading level 7
Course Type: Academic
### AIR CONDITIONING TECH (HART)

**HART 1356 EPA Recovery Certification Preparation** 3 Credits  (3 Lec, 0 Lab)
This course covers certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems.
Course Type: Technical

**HART 1401 Basic Electricity for HVAC** 4 Credits  (2 Lec, 4 Lab)
This course focuses on principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.
Course Type: Technical

**HART 1407 Refrigeration Principles** 4 Credits  (2 Lec, 4 Lab)
This course is an introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, and refrigeration components and safety.
Course Type: Technical

**HART 1441 Residential Air Conditioning** 4 Credits  (2 Lec, 4 Lab)
This is a study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems.
Co-requisite(s): HART 1401 and HART 1407 or department chair approval
Course Type: Technical

**HART 1445 Gas and Electrical Heating** 4 Credits  (2 Lec, 4 Lab)
This is a study of the procedures and principles used in servicing heating systems including gas-fired furnaces and electric heating systems.
Co-requisite(s): HART 1401 and HART 1407 or department chair approval
Course Type: Technical

**HART 2301 Air Conditioning and Refrigeration Codes** 3 Credits  (3 Lec, 0 Lab)
This course focuses on HVAC standards and concepts, with emphasis on understanding and documenting the codes and regulations required for a state mechanical contractors license and compliance with local codes.
Prerequisite(s): HART 1441 or HART 2441 or department chair approval
Course Type: Technical

**HART 2302 Commercial Air Conditioning System Design** 3 Credits  (3 Lec, 0 Lab)
This is an advanced study in essential elements of commercial air conditioning contracting, including duct systems design and/or material takeoff, weight estimating, equipment selection, using manufacturer’s catalog data, job cost estimating, scheduling preparation of shop drawings, and submittals.
Prerequisite(s): HART 2345 and HART 2441 or department chair approval
Course Type: Technical

**HART 2331 Advanced Electricity for HVAC** 3 Credits  (2 Lec, 4 Lab)
This course provides advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment, including detailed instruction in motors and power distribution motors, motor controls, and applications of solid state devices.
Prerequisite(s): HART 1441 or HART 2441, and HART 1445 or department chair approval
Course Type: Technical

**HART 2336 Air Conditioning Troubleshooting** 3 Credits  (2 Lec, 4 Lab)
This is an advanced course in the application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration component and system problems, including conducting performance tests.
Co-requisite(s): HART 2331 or department chair approval
Course Type: Technical

**HART 2338 Air Conditioning Installation and Startup** 3 Credits  (2 Lec, 4 Lab)
A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing.
Prerequisite(s): HART 1441 or HART 2441 and HART 1445 or department chair approval
Course Type: Technical

**HART 2343 Industrial Air Conditioning** 3 Credits  (2 Lec, 2 Lab)
This course is a study of components, accessories, applications, and installation of air conditioning systems above a 25 ton capacity.
Prerequisite(s): HART 2441 and HART 2331 or department chair approval
Course Type: Technical

**HART 2345 Residential A/C System Design** 3 Credits  (2 Lec, 2 Lab)
This course is a study the properties of air and results of cooling, heating, humidifying or dehumidifying. Other topics include analyzing and calculating heat gain or heat loss necessary for equipment selection and balancing air systems.
Prerequisite(s): HART 1441 and HART 1445 or department chair approval
Course Type: Technical

**HART 2349 Heat Pumps** 3 Credits  (2 Lec, 2 Lab)
This course is a study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems.
Prerequisite(s): HART 1441 and HART 1445 or department chair approval
Course Type: Technical

**HART 2357 Specialized Commercial Refrigeration** 3 Credits
This advanced course covers the components, accessories, and service of specialized refrigeration units, such as ice machines, soft-serve machines, cryogenics, and cascade systems.
Prerequisite(s): HART 1401 and HART 1407 or department chair approval.
(3:2:4)
Course Type: Technical
HART 2468 Practicum (or Field Experience) - HVAC/R Technology/Technician 3 Credits (0 Lec, 21 Lab)
This course offers practical general workplace training through individualized learning plans developed by the employer, the college, and the student. The student must have a HVAC/R related workplace experience to participate in this course. This workplace experience can be either a paid or unpaid. While the College can assist the student in locating a potential workplace experience, it is the student's responsibility to have this in place by the beginning of class.
Prerequisite(s): Completion of at least 16 semester hours of HVAC/R (HART) courses, an acceptable workplace experience, and an interview with a HVAC/R faculty.

Course Type: Technical

HART 2431 Advanced Electricity 4 Credits (3 Lec, 3 Lab)
This course provides advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment, including detailed instruction in motors and power distribution motors, motor controls, and applications of solid state devices.
Prerequisite(s): HART 1441, HART 1445 or department chair approval

Course Type: Technical

HART 2434 Advanced Air Conditioning Controls 4 Credits (2 Lec, 4 Lab)
This course covers the theory and application of electrical control devices, electromechanical controls, and/or pneumatic controls.
Co-requisite(s): HART 2331 or HART 2431 or department chair approval

Course Type: Technical

HART 2436 Air Conditioning Troubleshooting 4 Credits (3 Lec, 3 Lab)
This is an advanced course in the application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration component and system problems, including conducting performance tests.
Prerequisite(s): HART 1441 and HART 1445 or department chair approval

Course Type: Technical

HART 2441 Commercial Air Conditioning 4 Credits (2 Lec, 4 Lab)
This course is a study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Co-requisites: HART 1401 and HART 1407 or department chair approval

Course Type: Technical

HART 2442 Commercial Refrigeration 4 Credits (2 Lec, 4 Lab)
This course focuses on both the theory and practice in the maintenance of commercial refrigeration at both medium and low temperature applications, and ice machines.
Co-requisite(s): HART 2331 or department chair approval

Course Type: Technical

HART 2445 Residential Air Conditioning Systems Design 4 Credits (4 Lec, 0 Lab)
This course is a study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Also included is a study in essential elements of commercial air conditioning contracting including duct systems design; equipment selection using manufacturers' catalog data; and preparation of shop drawings and submittals.

Course Type: Technical

HART 2449 Heat Pumps 4 Credits (3 Lec, 3 Lab)
This is a study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems.
Prerequisite(s): HART 1401 and HART 1407 or department chair approval

Course Type: Technical

HART 41001 Basic Electricity of HVAC 6.4-17.6 Credits
HART 41003 A/C Control Principles 6.4-17.6 Credits
HART 41005 Air Conditioning II 4.8-16 Credits
HART 41007 Refrigeration Principles 6.4-16 Credits
HART 41011 Solar Fundamentals 6.4-6.4 Credits
HART 41021 HVAC Maintenance Skills 1.6-4.8 Credits
HART 41038 Air Conditioning I 8-17.6 Credits
HART 41041 Residential Air Conditioning 4.8-16 Credits
HART 41042 Commercial Refrigeration 6.4-17.6 Credits
HART 41045 Gas and Electric Heating 4.8-16 Credits
HART 41049 Heat Pumps 8-17.6 Credits
HART 41051 Energy Management 6.4-17.6 Credits
HART 41052 Energy Management 6.4-17.6 Credits
HART 41053 Energy Conservation and Manage 3.2-6.4 Credits
HART 41055 Air Conditioning II 4.8-16 Credits
HART 41056 EPA Recovery Certification Pre 3.2-9.6 Credits
HART 41091 Special Topics in Heating, Air 0.7-11.2 Credits
HART 41092 Special Topics in Energy Manag 0.7-11.2 Credits
HART 41093 Special Topics in Solar Techno 0.7-11.2 Credits
HART 41094 Special Topics in Heating, Air 0.7-11.2 Credits
HART 42001 Air Conditioning and Refrigera 4.8-12.8 Credits
HART 42002 Commercial Air Conditioning Sy 4.8-16 Credits
HART 42003 Domestic Refrigeration and Win 1.6-6.4 Credits
HART 42005 Central Air Conditioning Syste 1.6-6.4 Credits
HART 42009 Gas and Electric Furnaces 1.6-6.4 Credits
HART 42031 Advanced Electricity 4.8-16 Credits
HART 42034 Advanced A/C Controls 4.8-16 Credits
HART 42036 Air Conditioning Troubleshooti 4.8-16 Credits
HART 42038 Air Conditioning Installation 4.8-16 Credits
HART 42041 Commercial Air Conditioning 4.8-16 Credits
HART 42042 Commercial Refrigeration 4.8-16 Credits
HART 42043 Industrial Air Conditioning 4.8-16 Credits
HART 42045 Air Conditioning Systems Desig 4.8-16 Credits
HART 42049 Heat Pumps 4.8-16 Credits
HART 42057 Advanced Commercial Refrigerat 8-17.6 Credits
HART 55000 Refrigeration Principles: HVAC 18 9.6 Credits
Prerequisite(s): None Note: Textbook is required. This course is an introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety. (HART 1407)
HART 55001 Commercial Air Conditioning: HVAC 4B 9.6 Credits
Prerequisite(s): HART 1441 and HART 2431 or department chair approval. Note: Textbook is required. This course focuses on the study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. (HART 2441)

HART 55002 Basic Electricity for HVAC 9.6 Credits
Prerequisite(s): None. Note: Textbook is required. This course focuses on principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits and component theory and operation. (HART 1401)

HART 55003 Gas Electrical Heating 9.6 Credits
Prerequisite(s): HART 1401 and HART 1407 or department chair approval. Note: Textbook is required. This course is a study of the procedures and principles used in servicing heating systems including gas-fired furnaces and electric heating systems. (HART 2442)

HART 55004 Commercial Refrigeration: HVAC 2B 9.6 Credits
Prerequisite(s): HART 1401 and HART 1407 or department chair approval. Textbook Required. Theory and practical application in the maintenance of commercial refrigeration; medium, and low temperature applications and ice machines. (HART 2442)

HART 55005 Residential Air Conditioning 9.6 Credits
Prerequisite(s): HART 1401 and HART 1407 or department chair approval. Textbook Required. A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. (HART 1441)

HART 55006 Air Conditioning Troubleshooting 9.6 Credits
Prerequisite(s): HART 1441 and HART 1445 or department chair approval. Note: Textbook is required. An advanced course in application of troubleshooting principles and use of test instruments to diagnose a/c and refrigeration components and system problems, including conducting performance tests. (HART 2436)

HART 55007 AC & Refrigeration Codes 4.8 Credits
Prerequisite(s): HART 1441 or department chair approval. Note: Textbook is required. HVAC standards and concepts with emphasis on the understanding, and documentation of the codes and regulations required for the state mechanical contractors license and local codes. (HART 2301)

HART 55008 Advanced AC Controls 4.8 Credits
Prerequisite(s): HART 2431 and HART 241 or department chair approval. Note: Textbook is required. Theory and application of electrical control devices, electromechanical controls, and/or pneumatic controls. (HART 2334)

HART 55009 Residential A/C System Design 4.8 Credits
Prerequisite(s): HART 1441 and HART 1445 or department chair approval. Textbook Required. Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. (HART 2345)

HART 55010 Heat Pumps 9.6 Credits
Prerequisite(s): HART 1401 and HART 1407 or department chair approval. Textbook Required. This is a study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. (HART 2449)

HART 55011 Commercial A/C System Design 4.8 Credits
Prerequisite(s): HART 2345 and HART 2441 or department chair approval. Note: Textbook is required. This is an advanced study in essential elements of commercial air conditioning contracting, including duct systems design and/or material takeoff, weight estimating, equipment selection, using manufacturer's catalog data, job cost estimating, scheduling preparation of shop drawings, and submittals. (HART 2302)

HART 55012 Preparation for EPA Recovery Certification 4.8 Credits
Prerequisite(s): None. No Textbook Required. This course covers certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems. (HART 1356)

HART 55013 Advanced Electricity 9.6 Credits
Prerequisite(s): HART 1441, HART 1445 or department chair approval. Note: Textbook is required. This course provides advanced electrical instruction and skill building in installation and servicing of air conditioning and refrigeration equipment, including detailed instruction in motors and power distribution motors, motor controls and applications of solid state devices. (HART 2431)

HART 55014 Industrial Air Conditioning 4.8 Credits
Prerequisite(s): HART 2441 and HART 2431 or department chair approval. Textbook Required. Students will study components, accessories and installation of air conditioning systems exceeding 25 tons. (HART 2343)

HART 55015 HVAC I: 1A 5.2 Credits
Students will study the basic principles of air conditioning, heating and ventilation.

HART 55016 HVAC I: 1B 5.2 Credits
Students will continue their study of air conditioning, heating, ventilation and career opportunities in HVAC field.

HART 55017 HVAC III: 3A 7.3 Credits
Students will study air conditioning systems, system components, retail refrigeration systems and refrigerants.

HART 55018 HVAC II: 2A 8.8 Credits
A study of commercial air systems and controls.

HART 55019 HVAC II: 2B 8.8 Credits
An overview of air conditioning components and systems used in industrial applications

HART 55020 HVAC III: 3B 7.3 Credits
Principles of air conditioning system maintenance and troubleshooting.

HART 55021 HVAC IV: 4A 7.4 Credits
Study of drawings and building management systems used in the design of air conditioning systems.

HART 55023 HVAC IV: 4B 7.4 Credits
Covers procedures for startup and shutdown of heating and cooling systems.

HART 55024 HVAC Fast Track Course I 11.6 Credits
This class is an introduction to HVAC principles, terminology, tools, and skills.

HART 55025 HVAC Fast Track Course II 11.6 Credits
The study and applicaton of air conditioning principles, including air properties, maintenance, thermodynamics, and compressors.
HART 55026  EPA 608 Certification Preparation  0.8 Credits
Certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems.
ANTHROPOLOGY (ANTH)

ANTH 2301 Introduction to Physical Anthropology  3 Credits  (3 Lec, 0 Lab)
The study of human origins and bio-cultural adaptations. Topics may include primatology, genetics, human variation, forensics, health, and ethics in the discipline.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

ANTH 2302 Introduction to Archaeology  3 Credits  (3 Lec, 0 Lab)
The study of the human past through material remains. The course includes a discussion of methods and theories relevant to archeological inquiry. Topics may include the adoption of agriculture, response to environmental change, the emergence of complex societies, and ethics in the discipline.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

ANTH 2346 General Anthropology  3 Credits  (3 Lec, 0 Lab)
The study of human beings, their antecedents, related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics, their applications, and ethics in the discipline.
Prerequisite(s): Reading level 6 and Writing level 6
Course Type: Academic

ANTH 2351 Cultural Anthropology  3 Credits  (3 Lec, 0 Lab)
The study of human cultures. Topics may include social organization, institutions, diversity, interactions between human groups, and ethics in the discipline.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic
APPLIED MATHEMATICS (TECM)

TECM 1301  Industrial Mathematics  3 Credits  (3 Lec, 0 Lab)
This course covers math skills applicable to industrial occupations.
Includes fraction and decimal manipulation, measurement, percentage,
and problem solving techniques for equations and ratio/proportion
applications.
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

TECM 41001  Industrial Mathematics  4.8-6.4 Credits
TECM 41013  Technical Mathematics  1.6-4.8 Credits
TECM 41017  Technical Trigonometry  4.8-6.4 Credits
TECM 41041  Technical Algebra  4.8-4.8 Credits
TECM 41045  Technical Geometry  4.8-4.8 Credits
TECM 41049  Technical Math Applications  4.8-4.8 Credits
TECM 41091  Special Topics in Applied Math  0.7-11.2 Credits

TECM 55000  The Pipefitters Blue Book  2 Credits
This course is a study of the Pipefitters Bluebook, by W.V. Graves,
including its use the when taking the written assessment leading to
the NCCER Certified-Plus designation. The book will be used alongside
NCCER modules and a basic, non-function, non-printing calculators
allowed during the exam. In order to be prepared for examination formats
and the use a basic, non-function, non-printing calculators allowed during
the exam. Course cost includes a copy of the Bluebook and a calculator.
SCIT 1307  Applied Human Anatomy and Physiology I  3 Credits  (3 Lec, 0 Lab)
This course is an applied systematic study of the structure and function of the human body. Includes anatomical terminology, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, endocrine, digestive, urinary, reproductive, respiratory and circulatory. Emphasis on homeostasis.
Course Type: Technical

SCIT 1318  Applied Physics  3 Credits  (2 Lec, 2 Lab)
This course is an Introduction to physics for industrial applications including vectors, motion, mechanics, simple machines, matter, heat, and thermodynamics.
Prerequisite(s): TECM 1301 or higher, and Reading level 7, Writing level 7, Math level 6
Course Type: Technical

SCIT 1395  Special Topics in Analytical Chemistry  3 Credits
The course topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.
Prerequisite(s): MLAB 1101 (3:3-0).
Course Type: Technical

SCIT 1414  Applied General Chemistry I  4 Credits  (3 Lec, 3 Lab)
This course offers applications of general chemistry emphasizing industry-related laboratory skills and competencies including laboratory safety and report writing. It addresses supporting chemical theories including atomic and molecular structure, nomenclature, chemical reactivity, gas laws, acids and bases, and solutions, and an overview of organic chemistry.
Prerequisite(s): MATH 1333 or MATH 1314 or higher, Reading level 7, Writing level 7, Math level 6
Course Type: Technical

SCIT 41093  Special Topics in Physical Sci  0.7-11.2 Credits
SCIT 55000  Advanced Meteorology  4 Credits
Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. This course encompasses the following: the earth-atmosphere system, weather elements: atmospheric thermodynamics; wind systems; cyclones and anti-cyclones, air masses, fronts and middle-latitude cyclones; violent local storms; tropical storms; the synoptic weather map; weather service for merchant shipping; weather forecasting; ocean waves; sea ice and ice accretion; weather map construction and analysis; optimum ship routing utilizing the prevailing and projected weather conditions to advantage; weather routing to avoid adverse conditions; practice of practical shipboard reporting procedures. Forecasting and hurricane avoidance techniques. Students will be able to understand and interpret synoptic charts and forecast area weather. This syllabus covers the requirements of the 1995 STCW Convention Chapter II, Section A-II/2. This functional element provides the detailed knowledge to support the training outcomes related to the Navigation at the Management Level. Any applicant who has successfully completed this 40-hour Advanced Meteorology course will satisfy the Advanced Meteorology training requirements for STCW certification as Master or Chief Mate on vessels of 500 or more gross tonnage (ITC). The practical assessments in this course will be accepted as the equivalent of the following assessments from the National Assessment Guidelines for Table A-II/2 of the STCW Code: M-6-1A; M-6-2A. Applicants who have successfully completed your course need not present completed Control Sheets for these assessments in application for STCW certification.

SCIT 55001  Meteorology (Operation Level)  4 Credits
Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. This course provides the background knowledge in will have a thorough understanding of meteorology. The course provides an introduction to meteorology with specific emphasis on marine applications. Focuses on ocean weather phenomena as they impact vessel operations and the role of the ship's officer in observing, recording, and analyzing developing weather patterns. Knowledge of the characteristics of various weather systems, reporting procedures and recording systems.

SCIT 55002  Human Anatomy and Physiology I  12.8 Credits
Prerequisite(s): None. An applied systematic study of the structure and function of the human body. Includes anatomical terminology, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, and endocrine. Emphasis is placed on homeostasis, relationships and interdependence of systems. (BIOL 2401).

SCIT 55003  Human Anatomy and Physiology II  12.8 Credits
Prerequisite(s): None. A continuation of Human Anatomy Physiology I. The following body systems are included: digestive, respiratory, cardiovascular, lymphatic/immune, renal/excretory, and reproductive. Emphasis is on homeostasis. (BIOL 2402).
ART (ARTC)

ARTC 1302 Digital Imaging I 3 Credits (2 Lec, 4 Lab)
This course teaches digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image acquisitions.
Course Type: Technical

ARTC 1317 Design Communication I 3 Credits (2 Lec, 4 Lab)
This is an introductory study of design development relating to graphic design terminology, tools, media, and layout and design concepts. Topics include integration of type, images, and other design elements, and developing computer skills in industry standard computer programs.
Prerequisite(s): ARTC 1325 or approval of department chair
Course Type: Technical

ARTC 1325 Introduction to Computer Graphics 3 Credits (2 Lec, 4 Lab)
This is a survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, digital images, digital publishing, vector-based graphics, and interactive multimedia.
Course Type: Technical

ARTC 1327 Typography 3 Credits (2 Lec, 4 Lab)
This is a study of letter forms and typographic concepts as elements of graphic communication. Emphasis is on developing a current, practical typographic knowledge based on industry standards.
Prerequisite(s): ARTC 1325 or approval of department chair
Course Type: Technical

ARTC 2335 Portfolio Development for Graphic Design 3 Credits (2 Lec, 4 Lab)
Students prepare a portfolio comprised of completed graphic design projects. Evaluation and demonstration of portfolio presentation methods based on the student's specific area of study are explored.
Prerequisite(s): ARTC 1317 or approval of department chair
Course Type: Technical

ARTC 2347 Design Communication II 3 Credits (2 Lec, 4 Lab)
This course is an advanced study of the design process and art direction. The emphasis is on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements.
Prerequisite(s): ARTC 1317 or approval of department chair.
Course Type: Technical

ARTC 2366 Field Experience-Graphic Design, Commercial Art and Illustration 3 Credits (1 Lec, 20 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The plan relates the workplace training and experience to the student's general and technical course of study. The guided external experiences may be paid or unpaid. May be taken for credit in conjunction with each degree or certificate earned.
Prerequisite(s): ARTC 1317 or approval of department chair
Course Type: Technical

ARTC 55000 Computer Illustration 9.6 Credits
Exploration of computer programs with applications to illustration and photo manipulation and file management for reproduction. Emphasis on concept development in print digital delivery. (ARTC 1353)

ARTC 55001 Desktop Publishing with Adobe InDesign 4.8 Credits
Join the growing ranks of creative professionals discovering new levels of creative freedom and productivity using Adobe® InDesign® software. Tightly integrated with the Adobe applications you use most, InDesign delivers faster production workflows and a more fluid creative environment for designing professional layouts with sophisticated graphics and typography.

ARTC 55002 Desktop Publishing with Microsoft Publisher 4.8 Credits
Publisher is the Microsoft® Office business publishing and marketing materials program. Keeping in touch and communicating with customers is essential for any business. You can use Publisher to help you create professional marketing materials in-house, quickly and efficiently. These materials include brochures, newsletters, postcards, business cards, and more.

ARTC 55003 Illustration Concepts 9.6 Credits
Advanced study of different painting media such as digital and traditional tools. Emphasis on conceptualization and composition as they relate to "real world" assignments. (ARTC 2331)

ARTC 55004 Digital Painting & Imaging 9.6 Credits
General principles of digital image processing and electronic painting. Emphasis on bitmapped or raster-based marking and the creative aspects of electronic illustration for commercial and fine art applications. (ARTC 2305)

ARTC 55005 Illustration Techniques 9.6 Credits
Illustration techniques for production commercial art; and concepts, rough design, sketching, and discussions of various media and reproduction processes. (ARTC 1350)

ARTC 55006 Illustration 9.6 Credits
A study of illustration techniques in various media. Emphasis on creative interpretation and disciplined craftsmanship for visual communication of ideas. (ARTC 1321)

ARTC 55007 Intro to Computer Graphics 9.6 Credits
A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector-based graphics, and interactive multimedia. (ARTC 1325)

ARTC 55008 Adobe PhotoShop II for Photographers 3.2 Credits
Prerequisite(s): Introductory Professional Photography, Intermediate Professional Photography, Portrait Photography, Windows for the Desktop or equivalent knowledge, PhotoShop I for Photographers. This course for the Portrait/Wedding Photographers provides additional hands-on experience and systematic instructions on how to use Adobe Photoshop to enhance digital images. Each student will learn retouching techniques and the effective use of the clone, eraser, patch and healing tools, color correction using levels, curves and actions, to add borders and torn edges to images, sharpen soft photos and to add soft focus to smooth the skin, red-eye correction, the use of filters, merging images, and much more.

ARTC 55009 Digital Imaging I 9.6 Credits
Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image acquisitions. (ARTC 1302)

ARTC 55010 Adobe Photoshop Advanced 3.2 Credits
ART (ARTS)

ARTS 1301 Art Appreciation 3 Credits (3 Lec, 0 Lab)
This is a general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts.
Prerequisite(s): Reading level 6

Course Type: Academic

ARTS 1303 Art History I (Prehistoric to the 14th century) 3 Credits (3 Lec, 0 Lab)
This is a chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century.
Prerequisite(s): Reading level 7 and Writing level 7

Course Type: Academic

ARTS 1304 Art History II (14th century to the present) 3 Credits (3 Lec, 0 Lab)
This is a chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day.
Prerequisite(s): Reading level 7 and Writing level 7

Course Type: Academic

ARTS 1311 Design I (2-dimensional) 3 Credits (2 Lec, 4 Lab)
This is an introduction to the fundamental terminology, concepts, theory, and application of two-dimensional design.
Course Type: Academic

ARTS 1312 Design II (3-dimensional) 3 Credits (2 Lec, 4 Lab)
This is an introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design.
Prerequisite(s): ARTS 1311

Course Type: Academic

ARTS 1316 Drawing I 3 Credits (2 Lec, 4 Lab)
This is a foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline.
Course Type: Academic

ARTS 1317 Drawing II 3 Credits (2 Lec, 4 Lab)
This is a studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline.
Prerequisite(s): ARTS 1316

Course Type: Academic

ARTS 2311 Design III 3 Credits (2 Lec, 4 Lab)
This course covers elements and principles of art using two- and three-dimensional concepts. This in-depth study of current concerns and practices in the visual arts stresses individually directed studio work. Topics may include, but are not limited to design, drawing, painting, sculpture, ceramics, photography and design communication. Producing a transfer or job-oriented portfolio will be emphasized.
Prerequisite(s): Department chair approval.

Course Type: Academic

ARTS 2313 Design Communications I 3 Credits (2 Lec, 4 Lab)
This is an introductory study of design development relating to graphic design technology, tools, media, and layout and design concepts. Topics include integration of type, images, and other design elements, and developing computer skills in industry standard computer programs. Students will not receive credit for both ARTS 2313 and ARTC 1317.
Prerequisite(s): ARTC 1325 or ARTS 2348 or concurrent enrollment with ARTC 1325 or ARTS 2348 with department chair approval

Course Type: Academic

ARTS 2314 Design Communications II 3 Credits (2 Lec, 4 Lab)
This course offers general practice in commercial art and production. Students will not receive credit for both ARTS 2314 and ARTC 2347.
Prerequisite(s): ARTC 1317 or ARTS 2313

Course Type: Academic

ARTS 2316 Painting I 3 Credits (2 Lec, 4 Lab)
This course explores the potentials of painting media, with emphasis on color and composition.
Course Type: Academic

ARTS 2317 Painting II 3 Credits (2 Lec, 4 Lab)
This is a continuation of painting I with emphasis on individual expression.
Prerequisite(s): ARTS 2316 or approval of department chair

Course Type: Academic

ARTS 2323 Life Drawing I 3 Credits (2 Lec, 4 Lab)
Life drawing I is a studio course emphasizing structure and action of the human figure.
Prerequisite(s): ARTS 1316

Course Type: Academic

ARTS 2326 Sculpture I 3 Credits (2 Lec, 4 Lab)
This is an exploration of various sculptural approaches in a variety of media, including additive and subtractive techniques.
Course Type: Academic

ARTS 2333 Printmaking I 3 Credits (2 Lec, 4 Lab)
This is an introduction to printmaking, including monoprints, relief, intaglio, and serigraphy.
Course Type: Academic

ARTS 2341 Art Metals I 3 Credits (2 Lec, 4 Lab)
This course offers the exploration of ideas using basic techniques in jewelry and metal construction. This is a beginning course in the design of metal art focusing on the implementation of basic processes and techniques associated with jewelry and metalsmithing.
Course Type: Academic
ARTS 2346 Ceramics I 3 Credits (2 Lec, 4 Lab)
A studio course, this is an introduction to basic ceramic processes and an exploration of clay as an artistic medium, including mechanical (wheel-thrown) and hand-built techniques, and glazing and firing processes.
Course Type: Academic

ARTS 2347 Ceramics II 3 Credits (2 Lec, 4 Lab)
A studio course, this continuation of ARTS 2346 explores clay as an artistic medium, concentrating on combinations of mechanical and hand-built techniques.
Prerequisite(s): ARTS 2346
Course Type: Academic

ARTS 2348 Digital Art I 3 Credits (2 Lec, 4 Lab)
This studio art course explores the potential of computer hardware and software medium for their visual, conceptual, and practical uses in visual arts. Students will not receive credit for both ARTC 1325 and ARTS 2348.
Course Type: Academic

ARTS 2356 Fine Arts Photography I 3 Credits (2 Lec, 4 Lab)
This is a beginning course in the taking, developing, and printing of photographs. Students receive instruction in photographic principles and are given assignments to complete in the laboratory periods or outside class. The College furnishes darkroom facilities and a limited number of cameras. Students will not receive credit for both ARTS 2356 and COMM 1318.
Course Type: Academic

ARTS 2357 Fine Arts Photography II 3 Credits (2 Lec, 4 Lab)
This course offers continued development of techniques, with emphasis on content and composition of photographs, including a variety of professional and technical areas. Students will not receive credit for both ARTS 2357 and COMM 1319.
Prerequisite(s): COMM 1318 or ARTS 2356 or approval of department chair
Course Type: Academic

ARTS 2366 Watercolor I 3 Credits (2 Lec, 4 Lab)
This course introduces the basic techniques and materials of transparent and opaque watercolors.
Course Type: Academic

ARTS 2389 Academic Cooperative-Art 3 Credits (1 Lec, 8 Lab)
This course is an instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the student will set specific goals and objectives in the study of studio art and/or art history.
Prerequisite(s): ARTS 2348 and ARTS 2349, Reading level 6, Writing level 6
Course Type: Academic
ART (ARTV)

ARTV 1303  Basic Animation  3 Credits  (2 Lec, 4 Lab)
This course provides an examination of animation concepts, principles, and storyboard for basic production. It emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences.
Prerequisite(s): ARTC 1325 or approval of department chair
Course Type: Technical

ARTV 1341  3-D Animation I  3 Credits  (2 Lec, 4 Lab)
This course is an intermediate level 3-D course introducing animation tools and techniques used to create movement. It emphasizes using the principles of animation.
Prerequisite(s): ARTV 1345 or approval of department chair
Course Type: Technical

ARTV 1345  3-D Modeling and Rendering  3 Credits  (2 Lec, 4 Lab)
The student will receive instruction in the techniques of three-dimensional (3-D) modeling utilizing industry standard software. This includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping.
Course Type: Technical

ARTV 1351  Digital Video  3 Credits  (2 Lec, 4 Lab)
This is a course in producing and editing video and sound for multimedia or web productions. It emphasizes the capture, editing, and outputting of video using a desktop digital video workstation.
Course Type: Technical

ARTV 2351  3-D Animation II  3 Credits  (2 Lec, 4 Lab)
This course is an advanced level 3-D course utilizing animation tools and techniques used to develop movement. The emphasis is on advanced animation techniques.
Prerequisite(s): ARTV 1341
Course Type: Technical

ARTV 35002  Theatre Safety-Lighting Worksh  2 Credits
The students will get an overall theatrical facility safety lesson. Students will also learn the safety guidelines, practical applications, proper preparation, maintenance, operation and use of paints, chemicals and other potentially hazardous materials in the workplace. The student will also learn to compose the mandatory Material Safety Data Sheets. Students will learn the safety guidelines and practical applications of theatrical equipment used for fly rail systems and stage rigging in the modern theatre. Special attention will focus on proper preparation, maintenance, operation and use of equipment, tools, electricity, and lighting fixtures, power lifts, safety harnesses and fall arrest systems used in the workplace.

ARTV 41001  Animation 2-D  4.8-9.6 Credits
ARTV 41091  Special Topics in Visual and P  0.7-11.2 Credits
ARTV 55000  Advanced Digital Video  9.6 Credits

ARTV 55001  3-D Modeling & Rendering  9.6 Credits
The student will receive instruction in the techniques of three-dimensional (3-D) modeling utilizing industry standard software. This includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping. (ARTV 1345)
ASTRONOMY (ASTR)

ASTR 1103 Stars and Galaxies (lab) 1 Credit (0 Lec, 3 Lab)
This lab survey course in astronomy examines the history of astronomy, the stars, galaxies, galaxy clusters, and the universe outside our solar system. Lab work will include nighttime observations. The student will only receive credit for either ASTR 1103 or PHYS 1103.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): ASTR 1303
Course Type: Academic

ASTR 1104 The Solar System (lab) 1 Credit (0 Lec, 3 Lab)
This lab survey course in astronomy examines the history of astronomy; the sun and its solar system, including their origin; star and planet formation. Lab work will include nighttime observations. The student will only receive credit for either ASTR 1104 or PHYS 1104.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): ASTR 1304
Course Type: Academic

ASTR 1303 Stars and Galaxies (lecture) 3 Credits (3 Lec, 0 Lab)
This lecture survey course in astronomy examines the history of astronomy, the stars, galaxies, and the universe outside our solar system. Lab work will include nighttime observations. The student will only receive credit for either ASTR 1303 or PHYS 1303.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): ASTR 1103
Course Type: Academic

ASTR 1304 The Solar System (lecture) 3 Credits (3 Lec, 0 Lab)
This lecture survey course in astronomy examines the history of astronomy; the sun and its solar system, including their origin; star and planet formation. Lab work will include nighttime observations. The student will only receive credit for either ASTR 1304 or PHYS 1304.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): ASTR 1104
Course Type: Academic
AUTO COLLISION REPAIR
(ABDR)

ABDR 1303 Vehicle Design and Structural Analysis 3 Credits (2 Lec, 2 Lab)
This introduction to the collision repair industry emphasizes safety, professionalism, and vehicle structural design.
Course Type: Technical

ABDR 1307 Collision Repair Welding 3 Credits (2 Lec, 2 Lab)
This is a study of collision repair welding and cutting procedures.
Course Type: Technical

ABDR 1315 Vehicle Trim and Hardware 3 Credits (2 Lec, 2 Lab)
This is an in-depth study of vehicle trim and glass service.
Course Type: Technical

ABDR 1323 Front and Rear Wheel Alignment 3 Credits (2 Lec, 2 Lab)
This is an in-depth study of vehicle steering and suspension components including alignment, tire rotation, and balancing.
Course Type: Technical

ABDR 1431 Basic Refinishing 4 Credits (3 Lec, 3 Lab)
This is an introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis is on surface preparation, masking techniques, and refinishing of replacement parts.
Course Type: Technical

ABDR 1441 Structural Analysis and Damage Report I 4 Credits (3 Lec, 3 Lab)
This course offers expanded training in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs. Emphasis is on the alignment of component parts such as doors, hoods, front-end assemblies, and deck lids.
Course Type: Technical

ABDR 1449 Automotive Plastic and Sheet Molding Compound Repair 4 Credits (3 Lec, 3 Lab)
This is a comprehensive course in repair of non-metal composites, including the use of various types of adhesives.
Course Type: Technical

ABDR 1519 Basic Metal Repair 5 Credits (3 Lec, 5 Lab)
This course offers in-depth coverage of basic metal principles and working techniques, including proper tool usage and product application.
Course Type: Technical

ABDR 1555 Non-Structural Metal Repair 5 Credits (3 Lec, 5 Lab)
This course demonstrates sheet metal repair skills using mechanical and hydraulic equipment. Emphasis is on attachment devices used to straighten and align exterior body panels.
Course Type: Technical

ABDR 1558 Intermediate Refinishing 5 Credits (3 Lec, 5 Lab)
This course offers expanded training in mixing and spraying of automotive topcoats. Emphasis is on formula ingredients, reducing, thinning, and special spraying techniques. This course also introduces partial panel refinishing techniques and current industry paint removal techniques.
Course Type: Technical

ABDR 2255 Collision Repair Estimating 2 Credits (2 Lec, 1 Lab)
This is an advanced course in collision estimating and development of an accurate damage report.
Course Type: Technical

ABDR 2257 Collision Shop Management 2 Credits (2 Lec, 1 Lab)
This course covers examination of shop management functions and decision-making processes including planning, organizing, leading and staffing used in collision repair shops to ensure operational profitability.
Course Type: Technical

ABDR 2353 Color Analysis and Paint Matching 3 Credits (2 Lec, 2 Lab)
This is an advanced course in color theory, analysis, tinting, and advanced blending techniques for commercially acceptable paint matching.
Course Type: Technical

ABDR 2380 Cooperative Education - Autobody/Collision and Repair Technology 3 Credits (1 Lec, 14 Lab)
Career-related activities encountered in the student’s area of specialization are offered through an individualized agreement among the College, employer, and student. Under the supervision of the College and the employer, the student combines classroom learning with work experience. This course also includes a lecture component. This may be a paid or unpaid experience.
Prerequisite(s): Reading level 4
Course Type: Technical

ABDR 2502 Auto Body Mechanical and Electrical Service 5 Credits (3 Lec, 5 Lab)
This is a course in the repair, replacement, and/or service of collision damaged mechanics or electrical systems. Topics include drive train removal, re-installation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading diagrams, and troubleshooting.
Course Type: Technical

ABDR 2541 Major Collision Repair and Panel Replacement 5 Credits (3 Lec, 5 Lab)
This course covers instruction in preparation of vehicles for major repair processes, interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for re-installation.
Course Type: Technical

ABDR 2549 Advanced Refinishing 5 Credits (3 Lec, 5 Lab)
This course focuses on application of multi-stage refinishing techniques and advanced skill development solving refinishing problems. Includes application of multi-stage refinishing with emphasis on formula mixing and special spraying techniques.
Course Type: Technical

ABDR 2551 Specialized Refinishing Techniques 5 Credits (3 Lec, 5 Lab)
This course focuses on advanced topics in specialty automotive refinishing. Emphasis is on refinishing of plastics, fiberglass, aluminum and galvanized panels, as well as on custom graphics and current industry innovations.
Course Type: Technical
ABDR 55017 Collision Repair Shop Mgmt 4.8 Credits
ABDR 55018 Collision Repair Estimating 4.8 Credits
ABDR 55019 Basic Refin (Linked w/1431) 9.6 Credits
(ABDR 1031) An introduction to terms, trade practices, hand tools, current
refinishing products, shop safety, and equipment used in the automotive
refinishing industry. Academic linked with ABDR 1431.
ABDR 55000 Collision Repair Welding 6.4 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is a study of
collision repair welding and cutting procedures. (ABDR 1307)
ABDR 55001 Basic Refinishing 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an
introduction to current refinishing products, shop safety and equipment
used in the automotive refinishing industry. Emphasis is on surface
preparation, masking techniques and refinishing of replacement parts.
(ABDR 1431)
ABDR 55002 Intermediate Refinishing 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This course offers
expanded training in mixing and spraying of automotive topcoats.
Emphasis is on formula ingredients, reducing, thinning, and special
spraying techniques and current industry paint removal techniques.
(ABDR 1558)
ABDR 55003 Color Analysis and Paint Matching 6.4 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an
advanced course in color theory, analysis, tinting and advanced blending
techniques for commercially acceptable paint matching. (ABDR 2353)
ABDR 55004 Basic Metal Repair 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook is required. Covers metal
principles and working techniques including proper tool usage and
product application. (ABDR 1519)
ABDR 55005 Advanced Refinishing 12.8 Credits
Prerequisite(s): None. Textbook Required. This course focuses on
application of multi-stage refinishing techniques and advanced skill
development solving refinishing problems. Includes application of multi-
stage refinishing with emphasis on formula mixing and special spraying
techniques. (ABDR 2549)
ABDR 55006 Non-Structural Metal Repair 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook Required. This course
demonstrates sheet metal repair skills using mechanical and hydraulic
equipment. Emphasis on attachment devices used to straighten and align
exterior body panels. (ABDR 1555)
ABDR 55007 Specialized Refinishing 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook Required. Advanced topics in
specialty automotive refinishing. Emphasis on refinishing interior plastics,
fiberglass, and aluminum and galvanized panels as well as custom
graphics and current industry innovations. (ABDR 2551)
ABDR 55008 Vehicle Design & Structural Analysis 6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. An introduction to
the collision repair industry with emphasis on safety, professionalism and
vehicle structural design. (ABDR 1303)
ABDR 55009 Automotive Plastic Repair 9.6 Credits
Learn the techniques in the repair of interior and exterior plastics using
adhesives and plastic welding.

ABDR 55010 Major Collision Repair 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This course
focuses on instruction in preparation of vehicles for major repair
processes. It covers interpreting information from damage reports,
planning repair sequences, selecting appropriate tools and organizing
removed parts for reinstallation. (ABDR 2541)
ABDR 55011 Structural Analysis I 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. Students learn
the roughing and shaping procedures on automotive sheet metal
necessary to perform body repairs. Topics include the alignment of
component parts such as doors, hood, front-end, assemblies and deck
lids. (ABDR 1441)
ABDR 55012 Vehicle Trim and Hardware 6.4 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an in-depth
study of vehicle trim and glass service. (ABDR 1315)
ABDR 55013 Auto Body M & E Service 12.8 Credits
Prerequisite(s): Reading Level 4. Textbook Required. A course in the
repair, replacement, and/or service of collision damaged mechanical or
electrical systems. Topics include drive train removal, reinstallation and
service; cooling system service and repair; exhaust system service; and
emission control systems. Additional topics include wire and connector
repair; reading wiring diagrams, and troubleshooting. (ABDR 2502)
ABDR 55014 Collision Repair Estimating 4.8 Credits
Prerequisite(s): Reading Level 4. An advanced course in collision
estimating and development of an accurate damage report. (ABDR 2255)
ABDR 55015 Collision Shop Management 4.8 Credits
Prerequisite(s): Reading Level 4. No Textbook Required. This course covers
examination of shop management functions and decision-making processes including
planning, organizing, leading and staffing used in collision repair shops to
ensure operational profitability. (ABDR 2257)
ABDR 55016 Front and Rear Wheel Alignment 6.4 Credits
Prerequisite(s): Reading Level 4. No Textbook Required. The study of
vehicle steering components including alignment, tire rotation, and
balancing. (ABDR 1323)
ABDR 55017 Auto Plastic & Sheet Molded Compound Repair 9.6 Credits
This is a comprehensive course in repair of interior and exterior plastics,
including the use of various types of adhesives and state-of-the-art
plastic welding. (ABDR 1449)
AUTOMOTIVE TECHNOLOGY (AUMT)

AUMT 1271 Manufacturers Maintenance and Pre-Delivery 2 Credits (1 Lec, 3 Lab)
This course provides an overview of manufacturers specific automotive quick services and new/used vehicle preparation. Topics include vehicle inspections, preparing estimates, changing fluids and filters, proper hazardous waste disposal, minor electrical repairs and road-testing techniques using manufacturers information systems, forms, and maintenance/repair procedures. Students will learn how to inspect and evaluate vehicle systems to determine if advanced levels of repairs are needed. They also learn how to identify and operate necessary equipment and tools. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1272 Automotive Maintenance and Repair 2 Credits (1 Lec, 3 Lab)
This course provides an overview of manufacturers specific automotive quick services and new/used vehicle preparation. Topics include vehicle inspections, preparing estimates, changing fluids and filters, proper hazardous waste disposal, minor electrical repairs and road-testing techniques using manufacturers information systems, forms, and maintenance/repair procedures. Students will learn how to inspect and evaluate vehicle systems to determine if advanced levels of repairs are needed. They also learn how to identify and operate necessary equipment and tools. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1316 Automotive Suspension and Steering 3 Credits (2 Lec, 4 Lab)
This course is the study of the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures, and tire and wheel service. May be taught manufacturer specific.
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1319 Automotive Engine Repair 3 Credits (2 Lec, 4 Lab)
This course is the study of the fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407, Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1345 Automotive Climate Control Systems 3 Credits (2 Lec, 4 Lab)
This course is a study of the diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407, Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1346 Automotive Electrical Systems 4 Credits (2 Lec, 6 Lab)
This course is an overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service manuals. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1407 Automotive Electrical Systems 4 Credits (2 Lec, 6 Lab)
This course is an overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of charging and starting systems, and electrical accessories. Emphasis on electrical principles, schematic diagrams, and service manuals. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1410 Automotive Brake Systems 3 Credits (2 Lec, 6 Lab)
This course is the study of the operation and repair of drum/disc type brake systems. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific.
Prerequisite(s): AUMT 2421; Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1416 Automotive Suspension and Steering 4 Credits (2 Lec, 6 Lab)
This course is the study of the diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures, and tire and wheel service. May be taught manufacturer specific.
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1419 Automotive Engine Repair 4 Credits (2 Lec, 6 Lab)
This course is the study of the fundamentals of engine operation, diagnosis and repair. Emphasis on identification, inspection, measurements, disassembly, repair, and reassembly of the engine. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 1445 Automotive Climate Control Systems 4 Credits (2 Lec, 6 Lab)
This course is a study of the diagnosis and repair of manual/electronic climate control systems; includes the refrigeration cycle and EPA guidelines for refrigerant handling. May be taught manufacturer specific.
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 6
Course Type: Technical

AUMT 1447 Manufacturers Maintenance and Pre-Delivery 4 Credits (2 Lec, 6 Lab)
This course provides an overview of manufacturers specific automotive quick services and new/used vehicle preparation. Topics include vehicle inspections, preparing estimates, changing fluids and filters, proper hazardous waste disposal, minor electrical repairs and road-testing techniques using manufacturers information systems, forms, and maintenance/repair procedures. Students will learn how to inspect and evaluate vehicle systems to determine if advanced levels of repairs are needed. They also learn how to identify and operate necessary equipment and tools.
Prerequisite(s): Reading level 7, Writing level 6, Math level 6
Course Type: Technical
AUMT 2188  Internship - Automotive Technology  1 Credit  (0 Lec, 6 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4 and department chair/program coordinator approval.
Course Type: Technical

AUMT 2288  Internship - Automotive Technology  2 Credits  (0 Lec, 12 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4 and department chair/program coordinator approval.
Course Type: Technical

AUMT 2289  Internship Automotive Technology  2 Credits  (0 Lec, 12 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4 and department chair/program coordinator approval.
Course Type: Technical

AUMT 2313  Automotive Drivetrain and Axles  3 Credits  (2 Lec, 4 Lab)
This is a study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 2388  Internship - Automotive Technology  3 Credits  (0 Lec, 15 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): Reading level 7, Writing level 6, Math level 6 and department chair/program coordinator approval.
Course Type: Technical

AUMT 2413  Manual Drivetrain and Axles  4 Credits  (2 Lec, 6 Lab)
This is a study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407; Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 2417  Automotive Engine Performance Analysis I  4 Credits  (2 Lec, 6 Lab)
This course is the study of the theory, operation, diagnosis of drivability concerns, and repair of ignition, and fuel delivery systems. Includes use of current engine performance diagnostic equipment. May be taught with manufacturer specific.
Prerequisite(s): AUMT 2421; Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 2421  Automotive Electrical Diagnosis and Repair  4 Credits  (2 Lec, 6 Lab)
This is a course in repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. This course may be taught with manufacturer-specific focus.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 2425  Automotive Automatic Transmission and Transaxles  4 Credits  (2 Lec, 6 Lab)
This course is a study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions and transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. May be taught manufacturer specific.
Prerequisite(s): AUMT 1407; Reading level 7, Writing level 6, Math level 4
Course Type: Technical

AUMT 2434  Automotive Engine Performance Analysis II  4 Credits  (2 Lec, 6 Lab)
This course is the study of the diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. May be taught manufacturer specific.
Prerequisite(s): Reading level 7, Writing level 6, Math level 4
Course Type: Technical
AUMT 19009 Intro to Auto Maintenance 0 Credits
AUMT 41005 Introduction to Automotive Tec 4.8-16 Credits
AUMT 41007 Automotive Electrical Systems 4.8-16 Credits
AUMT 41009 Scan Tools Familiarization 0.7-11.2 Credits
AUMT 41010 Brakes 4.8-16 Credits
AUMT 41016 Suspension and Steering 9.6-16 Credits
AUMT 41017 Intermittent Electronic Diagno 0.7-11.2 Credits
AUMT 41019 Automotive Engine Repair 4.8-16 Credits
AUMT 41022 Front and Rear Suspension - Op 4.8-12.8 Credits
AUMT 41024 Service Attendant 0.7-3.2 Credits
AUMT 41025 Electrical/Electronic Circuits 4.8-12.8 Credits
AUMT 41029 Front and Rear Drive Engine Re 6.4-12.8 Credits
AUMT 41030 Disc/Drum Brake Systems 4.8-12.8 Credits
AUMT 41033 Inspection and Service of Engi 4.8-8 Credits
AUMT 41034 Automatic Transmission on Car 0.7-4.8 Credits
AUMT 41035 Engine Systems Operation and D 4.8-12.8 Credits
AUMT 41036 Electrical Accessories 0.7-4.8 Credits
AUMT 41045 Automotive Heating and Air Con 4.8-16 Credits
AUMT 41046 Auto Heating/AC Control System 0.7-8 Credits
AUMT 41048 Alternative Fuels Driveability 0.7-4.8 Credits
AUMT 41050 Alternative Fuels Vehicle Tech 0.7-4.8 Credits
AUMT 41051 Power Assist/Anti Lock Brake S 0.7-4.8 Credits
AUMT 41052 Rear Wheel Drive Clutches--Man 4.8-12.8 Credits
AUMT 41055 Operation and Diagnosis of Ign 4.8-12.8 Credits
AUMT 41056 Driveability/Diagnosis--Carbur 4.8-8 Credits
AUMT 41058 Driveability/Diagnosis--Fuel In 4.8-8 Credits
AUMT 41059 Advanced Scope Diagnosis 0.7-4.8 Credits
AUMT 41091 Special Topics in Auto/Automat 0.7-11.2 Credits
AUMT 42000 Engine Repair Cert Assessment 0.8 Credits
AUMT 42011 Automotive Electronic Controls 3.2-9.6 Credits
AUMT 42013 Manual Drive Train and Axles 4.8-16 Credits
AUMT 42017 Engine Performance Analysis I 4.8-16 Credits
AUMT 42021 Automotive Electrical Lighting 4.8-16 Credits
AUMT 42025 Automatic Transmission and Tra 4.8-16 Credits
AUMT 42026 Automatic Transmission Major S 0.7-4.8 Credits
AUMT 42027 Automatic Transmission Major S 0.7-4.8 Credits
AUMT 42029 Auto Adv Engine Performance Di 0.7-4 Credits
AUMT 42031 Advanced Engine Performance Di 0.7-3.2 Credits
AUMT 42032 Automatic Transmission and Tra 4.8-16 Credits
AUMT 42033 Automotive Engine Repair Updat 0.7-3.2 Credits
AUMT 42034 Engine Performance Analysis II 4.8-16 Credits
AUMT 42035 Automotive Service Excellence 0.8-6.4 Credits
AUMT 42036 Automotive Electronic Fuel Sys 0.7-3.2 Credits
AUMT 42037 Automotive Electronics 6.4-17.6 Credits
AUMT 42039 Automotive Electrical/Electron 0.7-3.2 Credits
AUMT 42040 Automotive Alternative Fuels 9.6-16 Credits

AUMT 55001 Entertainment Systems 1.6 Credits
A study of current automotive fuel systems to include tools and test equipment in conjunction with diagnosis, service and repair.

AUMT 55002 HVAC System Operations 0.8 Credits
A study of heating and air conditioning control systems. Topics include vacuum and electric switches and motors, manual and electronic controls.

AUMT 55003 HVAC Certification 0.8 Credits
A study of current refrigerants and retrofit systems, computer controlled air conditioning systems, and current compressor design. Utilization of test and recovery equipment to diagnose and service air conditioning systems of late model vehicles.

AUMT 55004 Rear Axle 1.6 Credits
A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on the diagnosis and repair of transmissions/transaxles and drive lines. May be taught with manufacturer specific instructions.

AUMT 55005 GM SIR 0.8 Credits
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

AUMT 55006 Auto Electrical System 12.8 Credits
Get an overview of your vehicle's automotive electrical system. Learn to test, diagnose and repair batteries and electrical accessories. (AUMT 1407)

AUMT 55007 Introduction to Automotive Technology 9.6 Credits
Prerequisite(s): Reading level 4. Textbook Required. This is an introduction to the automotive industry including automtive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, professional responsibilities, and basic automotive maintenance. (AUMT 1305)

AUMT 55008 Automotive Engine Repair 9.6 Credits
Prerequisite(s): AUMT 2434, Reading level 7, Writing level 6, Math level 6. Textbook required. Learn the fundamentals of engine operation, diagnosis and repair. Emphasis will be given to overhauling, disassembly, repair and reassembly of selected engines. (AUMT 1419)

AUMT 55009 Auto Transmission and Transaxle 12.8 Credits
Prerequisite(s): Reading level 7, Writing level 6, Math level 6. Textbook required. This is a study of the operation, hydraulic circuits and electronic controls of modern automatic transmissions/transaxles. It covers diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and repair techniques. (AUMT 2425)

AUMT 55010 Automotive Heating and Air Conditioning 9.6 Credits
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 6. Textbook required. Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of systems malfunctions. It covers EPA guidelines for refrigerant handling and new refrigerant replacements. (AUMT 1345)

AUMT 55011 Rear Axle Controls 1.6 Credits
A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on the diagnosis and repair of transmissions/transaxles and drive lines. May be taught with manufacturer specific instructions.
AUMT 55012 Electronic Suspension Systems 0.8 Credits  
Addresses information on current steering and suspension to include electronic and computerized test equipment used in conjunction with diagnosis, service, and repair of these systems.

AUMT 55013 Global Electrical Systems 1.6 Credits  
Advanced concepts of current electrical/electronic systems to include electronic and computerized test equipment used in conjunction with diagnosis, service, and repair of these systems.

AUMT 55014 GM Powertrain 1.6 Credits  
A study of current automotive fuel systems to include tools and test equipment in conjunction with diagnosis, service, and repair.

AUMT 55015 Brake Systems 0.8 Credits  
A study of current brake systems to include electronic and computerized test equipment in conjunction with diagnosis, service, and repair of these systems.

AUMT 55016 Automotive-Beginning 9 Credits  
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance.

AUMT 55017 Automotive-Beginning 7.8 Credits  
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance.

AUMT 55018 Automotive-Intermediate 5.85 Credits  
Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine.

AUMT 55019 Noise, Vibration & Harshness 0.8 Credits  
A study of diagnostic procedures using scopes, analyzers, and testers with electronic engine controls, under drive conditions.

AUMT 55020 Duramax 1.6 Credits  
Advanced concepts of information on current automotive engine performance systems to include tools and test equipment in conjunction with diagnosis, service, and repair.

AUMT 55021 Electrical/Electronics Terminals and Connectors 0.8 Credits  
Advanced concepts of current electrical/electronic systems to include electronic and computerized test equipment used in conjunction with diagnosis, service and repair of these systems.

AUMT 55022 Automotive Brake Systems 9.6 Credits  
Prerequisite(s): AUMT 1407, Reading level 7, Writing level 6, Math level 6. Textbook Required. This course focuses on the operation and repair of drum/disc type brake systems, with emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual and anti-lock brake systems, and parking brakes. This course may be taught manufacturer specific. (AUMT 1310)

AUMT 55023 Automotive Electronic Controls 9.6 Credits  
Prerequisite(s): Reading level 4. Textbook required. A study of electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. (AUMT 2311)

AUMT 55024 Engine Machining 12.8 Credits  
An in-depth study of precision engine rebuilding, cylinder reconditioning, and crack repair. Machines and equipment necessary to complete an engine repair will be utilized. (AUMT 2455)

AUMT 55025 Automatic Transmission/Transaxle Diagnostics 1.6 Credits  
This course will assist in developing the knowledge and skills needed to properly diagnose transmission faults and their effects on transmission operation.

AUMT 55026 Waterleak and Windnoise Management 0.8 Credits  
This course is hands-on training for body service technicians. Topics covered are proven diagnostic procedures, test equipment and methods, and the tools for adjustment and sealing operations.

AUMT 55027 TAEVT Educational Forum 0.8 Credits  
This course will improve the technician's understanding of emergency vehicle and repair. This course is set to meet the Texas Association of Emergency Vehicle Technician's Continuing Education Unit requirements.

AUMT 55028 Auto Electrical Diagnosis & Repair 9.6 Credits  
Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. (AUMT 2321)

AUMT 55029 Engine Mechanical Diagnostics and Measure 1.6 Credits  
Advanced concepts of information on current automotive engine performance systems to include tools and test equipment in conjunction with diagnosis, service, and repair.

AUMT 55030 Manual Gearbox Service 1.6 Credits  
For all GM transmission Service Technicians, this two day hands-on course provides an in depth unit repair of front and rear wheel drive manual gearboxes. The internal components will be described and also identified for the technician. There will also be an introduction to special tools and usage to perform repairs efficiently. Upon completion of this course, the technician will be able to perform Manual Gearbox system diagnostic and repair procedures.

AUMT 55031 Engine Repair Cert Assessment 0.8 Credits  
Service technician training is structured around a standard, performance based curriculum. The curriculum provides a blended approach to training. It divides training between training time in the dealership and various training locations. In the dealership the service technician acquires component, systems, and diagnostic knowledge. The service technician can practice and demonstrate the application of skills at various training locations. The capstone of this standard curriculum is GM MasterTechnician Certification (MTC) in each automotive or body service area.

AUMT 55032 GM Chassis Control Systems 0.8 Credits  
This course consisting of a WBT and Hands-On components will cover suspension component identification, operation, and diagnosis of various chassis systems such as independent and non-independent, tire pressure monitoring systems, level control systems, active suspension systems, and serial data communications. Alignment angles and how they affect overall handling will also be covered in this course.

AUMT 55033 Auto Suspension & Steering Systems 9.6 Credits  
Prerequisite(s): AUMT 1407, Reading level 7, Writing level 6, Math level 6. Textbook required. The course focuses on the theory and operation of automotive suspension and steering systems, including tire and wheel problem diagnosis, component repair, and alignment procedures. It may be taught with manufacturer-specific focus. (AUMT 1316)
AUMT 55034  GM Six Speed Automatic Transmission/Transaxle Servicing 1.6 Credits
For GM transmission service Technicians, provides an introduction to 6T70/75 six speed front wheel drive Hydramatic Transaxle and the 6L80/90 six speed rear wheel drive Hydramatic transmission. Complete teardown and reassembly of each transmission is performed by the student.

AUMT 55035 Toyota 623-Electrical Circuit Diagnosis 2.4 Credits
The Toyota Electrical Circuit Diagnosis course is designed to familiarize technicians with electrical circuit theory and applying diagnostic techniques to isolate circuit malfunctions.

AUMT 55036 Toyota 652-Body Electrical Diagnosis 2.4 Credits
The Toyota Body Electrical Diagnosis (652) course is designed to familiarize the technician with electrical switches and relays, electrical diagnostic tools and the six-step diagnostic process.

AUMT 55037 Front End Alignment 0.8 Credits
Familiarizes technicians with Toyota suspension components, steering systems and handling systems.

AUMT 55038 Toyota 752-Air Conditioning and Climate Control 1.6 Credits
The Toyota Air Conditioning & Climate Control course is designed to familiarize technicians with safety and environmental concerns regarding refrigerants, air conditioning and climate control operation, system diagnosis and retrieval of Diagnostic Trouble Codes.

AUMT 55039 Toyota 274-Automatic Transmission Diagnosis 2.4 Credits
Designed to familiarize the technician with the operation of Toyota automatic transmissions including the stresses of operation, diagnosis and servicing of the torque converter, planetary gear train and valve body. In addition, electrical control, preliminary checks, adjustments and shift lock mechanisms are also covered.

AUMT 55040 Toyota 552-Brake Systems 1.6 Credits
Covers the basic concepts of brake system operation, servicing techniques and troubleshooting.

AUMT 55041 Toyota 302-Manual Transmissions and Transaxles 1.6 Credits
Covers the principles of operation for the Toyota manual transmission/transaxle, servicing techniques, diagnosis and repair.

AUMT 55042 Toyota 852-Engine Control Systems I 2.4 Credits
Presents information on the essential principles, operation of Toyota engine control systems, component functions, diagnosis, use of applicable tools and servicing techniques.

AUMT 55043 Toyota 256-Hybrids General Service and Maintenance 0.8 Credits
Introduces the basic concepts of Toyota hybrid operation, diagnosis and repair techniques.

AUMT 55044 Moveable Tops 1.6 Credits
Students will be able to describe and apply the operation, preventive maintenance and repair techniques for moveable tops on vehicles.

AUMT 55045 Automotive Drive Train and Axles 9.6 Credits
A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on diagnosis and repair. (AUMT 2313)

AUMT 55046 Toyota Hybrid General Service & Maintenance 4 Credits
Covers the functions and principles of Toyota hybrid automobiles, and procedures for their maintenance, problem diagnosis and repair. Critical importance of safety and hybrid-unique equipment are also covered.

AUMT 55047 Automotive Hybrid Systems 3 Credits
Students will cover the functions and principles of hybrid automobiles, procedures for their maintenance, diagnosis and repair. Safety and unique hybrid equipment are also covered.

AUMT 55048 Electrical/Electronics Digital Multi Meter 0.8 Credits
Students use electronic and computerized test equipment to diagnose, service, and repair electrical/electronic automotive systems.

AUMT 55049 Global Diagnostic System and Multiple Diagnostic Interface 0.8 Credits
Covers equipment and techniques used diagnose engine controls, ignition systems, fuel systems and emission control systems using latest GM diagnostic technologies.

AUMT 55050 Hybrid Technology 0.8 Credits
Introduces the basic concepts of Toyota hybrid operation, diagnosis, and repair techniques.

AUMT 55051 Body Electrical Accessory Systems 0.8 Credits
This course allows the service technician to demonstrate their ability to diagnose different accessory system used in GM vehicles. This course is intended for experienced service technicians with competent electrical skills.

AUMT 55052 Automotive Engine Performance Analysis I 12.8 Credits
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 6. Textbook Required. Students will study the theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. (AUMT 2417)

AUMT 55053 Strategies for Efficient Diagnosis 0.8 Credits
Students will study multiple approaches to diagnostic techniques and concepts on current automotive engine performance systems. Upon completion of this course, technicians will be able to: utilize new tools to reduce warranty waste dollars; utilize the Strategy Based Diagnostic process to diagnose and service vehicles.

AUMT 55054 Automotive Alternative Fuels 9.6 Credits
A study of the composition and use of various alternative automobile fuels including retrofit procedures and applications, emission standards, availability, and cost effectiveness. Overview of federal and state regulations concerning fuels. (AUMT 2357)

AUMT 55055 Women and Automotive Maintenance 0.8 Credits
Students will learn the basics in automotive inspection and maintenance procedures.

AUMT 55056 Honda Express Service Training 5 Credits
This is an introductory course designed to provide the student with the fundamentals of operation and maintenance procedures including researching vehicle service information. Students will learn basic automotive shop safety, tool and equipment use. Upon completion of the course, students should be able to safely and accurately perform A1 and B1 vehicle inspection and maintenance service with efficiency and 100% accuracy.

AUMT 55057 eAssist System Diagnosis and Service 0.8 Credits
This course covers eAssist systems and diagnosis.

AUMT 55058 GM Safety Systems 1.6 Credits
The course covers components, operation, diagnostic and service procedures for GM safety systems.

AUMT 55059 GM Safety Systems - 8 hour 0.8 Credits
This course is offered to technicians who have already taken the GM Supplemental Restraint Systems component and will be learning about the new GM Safety Systems.
AUMT 55060 GM Engine Performance 1.6 Credits
This ILT course component covers the operation, diagnostic, and service procedures for GM engine performance, including the air management, fuel, ignition, electronic control, and emission systems. In addition, it will cover the various types of diagnostic procedures used by technicians used to determine systems concerns. Upon completion of this course component technicians will be able to perform diagnostic procedures to determine air management concerns, perform diagnostic procedures to determine fuel concerns, perform diagnostic procedures to determine ignition control concerns, perform diagnostic procedures to determine electronic control concerns, and perform diagnostic procedures to determine emission control systems concerns. No prerequisites required.

AUMT 55061 GM Front-Wheel Drive/Rear-Wheel Drive Operation 1.6 Credits
This course consists of WBT and Hands-On components. The WBT will introduce technicians to the names and types on internal and external components, the clutch hydraulic system along and the steps of with the operation of the clutch hydraulic system, and the power flow of a Front-Wheel Drive (FWD) and Rear-Wheel Drive (RWD) manual transmission. The WBT will also introduce some general diagnostic process for diagnosing FWD/RWD concerns. The Hands-On section of this course will fully immerse the students in the tear-down and reassembly of FWD and RWD manual transmissions, and answer a series of questions about each of the transmissions that they service.

AUMT 55062 Theory of Eng Perf Analysis I 3.2 Credits
Prerequisite(s): AUMT2421, Reading level 7, Writing level 6, Math level 6. Operation and diagnosis of basic engine dynamics including the study of the ignition system, fuel delivery systems, and the use of engine performance diagnostic equipment. (AUMT 2215)

AUMT 55063 Theory of Eng Perf Analysis II 3.2 Credits
Prerequisite(s): AUMT 2215, Reading level 7, Writing level 6, Math level 6. A study of the emission systems, computerized engine performance, and advanced ignition and fuel systems, including advanced engine performance diagnostic equipment. (AUMT 2231)

AUMT 55064 Automotive Electrical Systems Lab 9.6 Credits
Prerequisite(s): Reading level 7, Writing level 6, Math level 6. No Textbook Required. An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of, charging and starting systems, and electrical accessories. Emphasis on electrical principles schematic diagrams, and service manuals. (AUMT 1307)

Co-requisite(s): AUMT 1253.

AUMT 55065 Automotive Performance Analysis I 12.8 Credits
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 6.

Co-requisite(s): AUMT 2215. This is a course in repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. (AUMT 2317)

AUMT 55066 Automotive Engine Performance Analysis Lab II 12.8 Credits
Prerequisite(s): AUMT 2215 and 2317, Reading level 7, Writing level 6, Math level 6.

Co-requisite(s): AUMT 2231. This course is the study of the diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems. Includes use of advanced engine performance diagnostic equipment. (AUMT 2334)

AUMT 55067 GM - Duramax 1.6 Credits
Diagnose computerized engine controls, ignition systems, fuel systems, air induction systems, and emission control systems.

AUMT 55068 Auto Trans and Transaxles Lab 9.6 Credits
Students will study automotive drivelines, diagnosis of clutches, transmissions and differentials; servicing constant velocity joints. (AUMT 2325)

AUMT 55069 Theory of Automotive Dr Trn and Axle 3.2 Credits
Prerequisite(s): AUMT 2421, Reading level 7, Writing level 6, Math level 6. A study of automotive clutches, clutch operation devices, manual transmission/transaxles, and differentials. Emphasis on theory of transmission/transaxle and drive line components. (AUMT 2209)

AUMT 55070 Theory of Trans and Transaxle 3.2 Credits
Prerequisite(s): AUMT2209 and 2313, Reading level 7, Writing level 6, Math level 6. Theory of operation, hydraulic principles, and electronic circuits of modern automatic transmissions and transaxles. Discussion of diagnosing and repair techniques. (AUMT 2223)

AUMT 55071 Theory of Automotive Electrical Systems 3.2 Credits
Prerequisite(s): Reading level 7, Writing level 6, Math level 6. This is a course in automotive electrical systems including operational theory, testing and diagnosis of batteries, charging and starting systems, and electrical accessories. Includes use of electrical schematic diagrams and services.

AUMT 55072 Alternative Fuels Training for Fleet Professionals 0.8 Credits
This course helps participants learn how to safely install CNG component to NFPA 52 code, provides information to help pass the CSA Fuel System Inspector exam, and learn to recognize unsafe vehicles that are maintained in your fleet. Participants will gain an understanding of regulations needed to install CNG components on a conversion, learn what documents to study to be compliant.

AUMT 55073 Alternative Fuels Training for First Responders 0.8 Credits
This course will train First Responders (Fire, Police, EMT, and Towing/Enforcement Officials) on how to safely deal with incidents involving alternative fuel vehicles (AFV’s), versus conventional gasoline/diesel powered vehicles.

AUMT 55074 Alternative Fuels Training for Permitting and Code Enforcement Officials 0.8 Credits
This one day course is designed to provide participants the ability to obtain a solid foundation of information about alternative fuels, alternative fueled vehicles and advanced technology vehicles. Participants also gain the ability to discuss different alternative fuel technologies and the proper and efficient manner of permitting and meeting the current permitting and codes for their: 1. Electric vehicle charging stations; 2. Liquefied Petroleum Gas (LPG) propane refilling stations; 3. Liquefied Natural Gas (LNG) refilling stations; 4. Hydrogen refueling stations.
BIOLOGY (BIOL)

BIOL 1106 Biology for Science Majors I (lab) 1 Credit  (0 Lec, 3 Lab)
In this lab course, the fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. A student may not use both BIOL 1306 & 1106 and 1308 & 1108 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1306
Course Type: Academic

BIOL 1107 Biology for Science Majors II (lab) 1 Credit  (0 Lec, 3 Lab)
In this lab course, the diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. A student may not use both BIOL 1307 & 1107 and 1309 & 1109 to satisfy the core.
Prerequisite(s): Reading level 7; co-requisite BIOL 1307
Course Type: Academic

BIOL 1108 Biology for Non-Science Majors I (lab) 1 Credit  (0 Lec, 3 Lab)
This lab course provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. THIS COURSE IS NOT INTENDED FOR SCIENCE MAJORS. A student may not use both BIOL 1306 & 1106 and 1308 & 1108 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1308
Course Type: Academic

BIOL 1109 Biology for Non-Science Majors II (lab) 1 Credit  (0 Lec, 3 Lab)
This lab course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. THIS COURSE IS NOT INTENDED FOR SCIENCE MAJORS. A student may not use both BIOL 1307 & 1107 and 1309 & 1109 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1309
Course Type: Academic

BIOL 1111 General Botany (lab) 1 Credit  (0 Lec, 3 Lab)
This is a lab course in the fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.) Recommended Prerequisite: Reading level 7;
Prerequisite(s): MATH 1314 - Successful completion of College Algebra is recommended. Reading level 7;
Co-requisite(s): BIOL 1311
Course Type: Academic

BIOL 1113 General Zoology (lab) 1 Credit  (0 Lec, 3 Lab)
This is a lab course in the fundamental biological concepts relevant to animals including systematics, evolution, structure, function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny and ecology. (This course is intended for science majors.) Recommended Prerequisite: Reading level 7;
Prerequisite(s): MATH 1314 - Successful completion of College Algebra is recommended. Reading level 7;
Co-requisite(s): BIOL 1313
Course Type: Academic

BIOL 1306 Biology for Science Majors I (Lecture) 3 Credits  (3 Lec, 0 Lab)
In this lecture course, the fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. A student may not use both BIOL 1306 & 1106 and 1308 & 1108 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1106
Course Type: Academic

BIOL 1307 Biology for Science Majors II (Lecture) 3 Credits  (3 Lec, 0 Lab)
In this lecture course, the diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. A student may not use both BIOL 1307 & 1107 and 1309 & 1109 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1107
Course Type: Academic

BIOL 1308 Biology for Non-Science Majors I (Lecture) 3 Credits  (3 Lec, 0 Lab)
This lecture course provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. THIS COURSE IS NOT INTENDED FOR SCIENCE MAJORS. A student may not use both BIOL 1306 & 1106 and 1308 & 1108 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1108
Course Type: Academic

BIOL 1309 Biology for Non-Science Majors II (Lecture) 3 Credits  (3 Lec, 0 Lab)
This lecture course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. THIS COURSE IS NOT INTENDED FOR SCIENCE MAJORS. A student may not use both BIOL 1307 & 1107 and 1309 & 1109 to satisfy the core.
Prerequisite(s): Reading level 7;
Co-requisite(s): BIOL 1109
Course Type: Academic
BIOL 1311 General Botany 3 Credits (3 Lec, 0 Lab)
This is a lecture course in the fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.) Recommended Prerequisite: Reading level 7; Prerequisite(s): MATH 1314 - Successful completion of College Algebra is recommended. Reading level 7;
Co-requisite(s): BIOL 1111
Course Type: Academic

BIOL 1313 General Zoology (Lecture) 3 Credits (3 Lec, 0 Lab)
This is a lecture course in the fundamental biological concepts relevant to animals including systematics, evolution, structure, function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny and ecology. (This course is intended for science majors.) Recommended Prerequisite: Reading level 7; Prerequisite(s): MATH 1314 - Successful completion of College Algebra is recommended. Reading level 7;
Co-requisite(s): BIOL 1113
Course Type: Academic

BIOL 1322 Nutrition and Diet Therapy 3 Credits (3 Lec, 0 Lab)
This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. Prerequisite(s): Reading level 7. Cross-listed as HECO 1322. Credit will only be issued for BIOL 1322 or HECO 1322, not both.
Course Type: Academic

BIOL 2101 Human Anatomy and Physiology I (Lab) 1 Credit (0 Lec, 3 Lab)
The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses. BIOL 1306/1106 is highly recommended for success in BIOL 2101, but it is not required. Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): BIOL 2301
Course Type: Academic

BIOL 2102 Human Anatomy and Physiology II (Lab) 1 Credit (0 Lec, 3 Lab)
The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Prerequisite(s): BIOL 2301/2101 (final grade of C or better recommended), and Reading level 7;
Co-requisite(s): BIOL 2302
Course Type: Academic

BIOL 2120 Microbiology for Health Science Majors (Lab) 1 Credit (0 Lec, 3 Lab)
This lab course covers basics of culture and identification of bacteria and microbial ecology. This course is primarily directed at pre-nursing and other pre-allied health majors and covers basics of microbiology. Emphasis is on medical microbiology, infectious diseases, and public health. (A student may not receive credit for both BIOL 2320/2120 and BIOL 2321/2121.) Prerequisite(s): BIOL 2301/2101 or 2302/2102 (recommended to be met with a C or better) or approval by department chair, and Reading level 7;
Co-requisite(s): BIOL 2320
Course Type: Academic

BIOL 2121 Microbiology for Science Majors (Lab) 1 Credit (0 Lec, 3 Lab)
This lab course focuses on laboratory activities that will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. (A student may not receive credit for both BIOL 2320/2120 and BIOL 2321/2121.) Prerequisite(s): BIOL 1306/1106 and BIOL 1307/1107, or BIOL 1311/1111 and 1313/1113; CHEM 1311/1111 and 1312/1112, and sophomore standing; Reading level 7;
Co-requisite(s): BIOL 2321. Some prerequisites may be waived with permission of department chair.
Course Type: Academic

BIOL 2301 Human Anatomy and Physiology I (Lecture) 3 Credits (3 Lec, 0 Lab)
Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. BIOL 1306/1106 is highly recommended for success in BIOL 2301, but it is not required. Prerequisite(s): Reading level 7, Writing level 7, Math level 8;
Co-requisite(s): BIOL 2301
Course Type: Academic

BIOL 2302 Human Anatomy and Physiology II (Lecture) 3 Credits (3 Lec, 0 Lab)
Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body, including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Including the digestive, urinary, reproductive, respiratory, and circulatory systems. Prerequisite(s): BIOL 2301/2101 (recommended with a final grade of C or better), and Reading level 7;
Co-requisite(s): BIOL 2102
Course Type: Academic
BIOL 2320 Microbiology for Health Science Majors (Lecture) 3 Credits  
(3 Lec, 0 Lab)  
This lecture course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. (A student may not receive credit for both BIOL 2320/2120 and BIOL 2321/2121.)  
Prerequisite(s): BIOL 2301/2101 or 2302/2102 (recommended to be met with a C or better) or approval by department chair, and Reading level 7;  
Co-requisite(s): 2120  
Course Type: Academic

BIOL 2321 Microbiology for Science Majors (Lecture) 3 Credits  (3 Lec, 0 Lab)  
This course focuses on the principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. (A student may not receive credit for both BIOL 2320/2120 and BIOL 2321/2121.)  
Prerequisite(s): BIOL 1306/1106 and BIOL 1307/1107, or BIOL 1311/1111 and 1313/1113; CHEM 1311/1111 and 1312/1112; and sophomore standing, Reading level 7. Some prerequisites may be waived with permission of department chair.  
Co-requisite(s): BIOL 2121  
Course Type: Academic

BIOL 2389 Academic Cooperative 3 Credits  (1 Lec, 8 Lab)  
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives of study of living organisms and their systems.  
Prerequisite(s): Eight hours of biology and/or environment science; Reading level 7, Writing level 7, Math level 8  
Course Type: Academic

BIOL 2404 Introduction to Anatomy and Physiology (lecture & lab) 4 Credits  (3 Lec, 3 Lab)  
This course is a study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. Content may be either integrated or specialized. Program Note: This course is designed specifically for Non-Nursing Allied Health Programs - Health Information Technology, Medical Imaging, Respiratory Care, and Surgical Technology programs. Students seeking a nursing degree must take BIOL 2301/2101 and BIOL 2302/2102 (formerly BIOL 2401 and 2402).  
Prerequisite(s): Reading level 7  
Course Type: Academic

BIOL 49002 Homeschool Biology Lab 3.3 Credits
BIOMEDICAL EQUIPMENT (BIOM)

BIOM 1309 Applied Biomedical Equipment Technology 3 Credits (2 Lec, 2 Lab)
This course is an introduction to biomedical instrumentation as related to anatomy and physiology. Includes medical devices for monitoring, diagnosis, and treatment of anatomical systems.
Course Type: Technical

BIOM 1315 Medical Equipment Networks 3 Credits (2 Lec, 2 Lab)
This course covers the identification of basic principles of medical equipment networking including hardware, software, and connectivity issues of medical equipment in healthcare facilities.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 1341 Medical Circuits Troubleshooting 3 Credits (2 Lec, 2 Lab)
This course covers development of skills in troubleshooting of medical electronic circuits and utilization of test equipment.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 1350 Diagnostic Ultrasound Imaging Systems 3 Credits (2 Lec, 4 Lab)
This course covers diagnostic ultrasound imaging systems including basic systems troubleshooting and problem solving.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 1355 Medical Electronic Applications 3 Credits (2 Lec, 2 Lab)
This course covers the presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 2301 Safety in Health Care Facilities 3 Credits (3 Lec, 1 Lab)
This course is a study of codes, standards and management principles related to biomedical instrumentation emphasizing application of safety test equipment, preventive maintenance procedures, and documentation of work performed.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 2311 General Medical Equipment I 3 Credits (2 Lec, 3 Lab)
This course is a study in analysis of selected current paths from a larger schematic including discussion of equipment and disassembly and reassembly of equipment.
Co-requisite(s): BIOM 1309 and CETT 1302
Course Type: Technical

BIOM 2315 Physiological Instruments I 3 Credits (2 Lec, 2 Lab)
This course is the theory of operation, circuit analysis, and troubleshooting physiological instruments.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 2319 Fundamentals of X-Ray and Medical Imaging Systems 3 Credits (2 Lec, 3 Lab)
This course is a study in radiation theory and safety hazards, fundamental circuits, and application of X-ray systems including circuit analysis and troubleshooting.
Co-requisite(s): BIOM 1309
Course Type: Technical

BIOM 2343 General Medical Equipment II 3 Credits (2 Lec, 3 Lab)
This course covers the theory and principles of operation of a variety of basic electro-mechanical equipment with emphasis on repair and service of actual medical equipment.
Prerequisite(s): BIOM 2311
Course Type: Technical

BIOM 2389 Internship - Biomedical Technology/Technician 3 Credits (0 Lec, 18 Lab)
This course is a work-based training experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): BIOM 1309, 1315, 1341, 1355, and 2311 or Department Chair Approval.
Course Type: Technical

BIOM 42071 Ext. Exp. in Biomed. Tech. 0.7-16 Credits
BUSINESS (BUSG)

BUSG 1341 Small Business Financing 3 Credits (3 Lec, 0 Lab)
This course focuses on understanding the financial structure of a small business. Topics include: business financing, budgeting, record keeping, taxation, insurance, and banking.
Course Type: Technical

BUSG 2309 Small Business Management 3 Credits (3 Lec, 0 Lab)
This is a course on how to start and operate, and grow a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, accounting, financial needs, staffing, marketing strategies, and legal issues.
Prerequisite(s): Reading level 4
Course Type: Technical

BUSG 2317 Business Law/Commercial 3 Credits (3 Lec, 0 Lab)
This course explores the relationships of law and business as they relate to commercial transactions.
Prerequisite(s): Reading level 7
Course Type: Technical

BUSG 35004 ST in Overcoming Chaos 0.08 Credits
BUSG 35005 Brain Boosters-ONLINE 0.08 Credits
Most workers today, regardless of their position and responsibilities, face an overwhelming need to use their brains more effectively. Learning and adapting to changing demands are the critical survival skills for today and the future. This course will help you sharpen your learning, remembering, and thinking skills through stimulating exercises and practical experiences. During this course, you'll explore your current strategies for learning and remembering as you map out techniques for dealing with new information and skills.

BUSG 35006 Becoming an Extraordinary Solver 0.08 Credits
Identified by many as a career-survival skill for the new millennium, problem solving is increasingly important at all levels in the organization. We are all problem solvers. Problems arise and we find ways to avoid them, adapt to them, or solve them. The extraordinary problem solver does much more by turning problems into opportunities. Learn the skills that take you beyond ordinary problem solving. Tool and techniques give you step-by-step guidance for solving your most challenging problems.

BUSG 35007 Finance: Your Enterprise 0.08 Credits
BUSG 35008 Customer Serv. Excellence 101 1.2 Credits
BUSG 39001 Pampered Fine Dining 0.02 Credits
BUSG 39003 Personality Type Amg Us ONLINE 0.8 Credits
BUSG 41000 General Business 3.2-4.8 Credits
BUSG 41001 Introduction to Business 4.8-4.8 Credits
BUSG 41002 E-Business Management 4.8-12.8 Credits
BUSG 41004 Personal Finance 4.8-9.6 Credits
BUSG 41008 Small Business Management 1.6-6.4 Credits
BUSG 41012 Intro. to Database Integ. for 0.7-4 Credits
BUSG 41015 Small Business Operations 4.8-4.8 Credits
BUSG 41020 Small Business Record Keeping 0.7-3.2 Credits
BUSG 41021 Tax Information for the Small 0.7-4.8 Credits
BUSG 41022 Income Tax Preparation for Smal 0.7-4.8 Credits
BUSG 41023 Survival Skills for Small Busi 4.8-12.4 Credits
BUSG 41024 How to Start Your Own Business 1.6-6.4 Credits
BUSG 41025 Business Plan Preparation 0.7-3.2 Credits
BUSG 41026 Legal Considerations in Small 0.7-3.2 Credits
BUSG 41027 Funding a Small Business 0.7-3.2 Credits
BUSG 41029 Financial Planning Skills 0.7-4.8 Credits
BUSG 41041 Small Business Financing 4.8-4.8 Credits
BUSG 41045 Principles of Finance 4.8-4.8 Credits
BUSG 41091 Special Topics in Business, Ge 0.7-11.2 Credits
BUSG 41092 Special Topics in Enterprise M 0.7-11.2 Credits
BUSG 41093 Special Topics in Finance, Gen 0.7-11.2 Credits
BUSG 41094 Special Topics in Financial Pl 0.7-11.2 Credits
BUSG 42005 Business Law/Contracts 4.8-4.8 Credits
BUSG 42007 Legal and Social Environment o 4.8-4.8 Credits
BUSG 42009 Small Business Management 4.8-4.8 Credits
BUSG 42017 Business Law/Commercial 4.8-4.8 Credits
BUSG 42030 Advanced Scripting for E-Comme 4.8-12.8 Credits
BUSG 55002 Small Business Management 4.8 Credits
Note: Additional distance learning fees for online or hybrid course will be assessed at time of payment. Textbook is required. Learn the details to starting and operating your own small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing, strategies, and legal issues. (BUSG 2309)

BUSG 55004 Business Report Writing and Correspondence 4.8 Credits
Prerequisite(s): None Note: Textbook required Focus on the history of business and business organization including economic systems, types of ownerships, and laws affecting and regulating business. Emphasis on topics related to the specialized fields of management, marketing, finance, manufacturing, production, law, risk and insurance, and human resources. (BUSI 1304)

BUSG 55005 Introduction to Business 4.8 Credits
Prerequisite(s): Reading Level 6 Note: Textbook required This course teaches fundamental business principles, including structure, function, resources, and operational processes. (BUSI 1301)
BUSG 55006 Business Law I 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This is a study of the principles of law which form the legal framework for business activity including applicable statutes, contracts, and agency. (BUSI 2301)

BUSG 55007 Creating Stellar Customer Relations 1.6 Credits
This workshop provides skills for developing the service mindset and behaviors that create customer loyalty, even after service failures. Foundational-core skills, knowledge and attitudes every individual should have.

BUSG 55008 Front Desk Specialist for the Medical Office 0.8 Credits
Prerequisite(s): None. This session will inspire both new and experienced staff to take your practice to the next level. Front desk personnel, billing/collections and office managers will return to the office with practice tips and new ideas for improving performance. Topics include: patient confidentiality HIPAA compliance; short-notice appointments and excessive wait time; problem-solving skills for the front desk; how to speak to angry or abusive patients with tact; using customer feedback to improve operations; tips for encouraging more referrals, conflict resolution tactics that really work, and more. Earn 6 CEU’s for PMI certification. Note: Materials are Provided.

BUSG 55010 Entrepreneurship: First Step 0.7 Credits
Learn how to define your business idea, determine its market potential, find out about incorporating, and conduct a feasibility study.

BUSG 55011 Excellence in Service - Basic 0.7 Credits
This course provides a customer service process that includes building relationships with customers, representing your organization in a courteous and polite manner, successfully completing transactions, providing necessary information, possessing authority to meet customer needs and fulfilling other requests for the customer.

BUSG 55012 Accounting for Small Business 0.7 Credits
Accounting provides the framework to evaluate the financial health and success of a business. Accounting for Small Business is a practical introduction to basic accounting concepts and the primary financial statements. By learning some basic accounting knowledge and skills, small business owners will be better able to evaluate new opportunities, manage current operations, ensure timely and accurate tax compliance and attract new partners or investors. This course provides a foundation for using accounting concepts as an essential tool in managing a small business.

BUSG 55013 Professional Development Essentials 3.9 Credits
This course provides study skills to receptive students. In turn, those students take responsibility for their future and become excited about how lifelong learning is the foundation for professional and personal growth. Also included is study of the skills required to obtain and maintain a job. Topics include standard applications for employment, interview procedures, working with placement agencies, personal appearance and attitudes, employer expectations, and employer/employee relations.

BUSG 55015 Communication Skills for the Workplace I 3.6 Credits
Development of workplace skills in preparation for workforce/occupational training. This course will focus on employability skills and communication skills focusing on comprehension and interpretation of written materials. Course could be repeated if additional improvement is determined to be necessary.

BUSG 55016 Starting a Business in Photography 2.4 Credits
Explore the basic foundation needed to have a successful business in photography; from required documentation to choosing what type of photography business is right for the individual, coupled with basic knowledge of federal, state or local laws and regulations governing the photography industry.

BUSG 55017 Business Photography Intermediate 3.2 Credits
Recap the basic foundation needed to start a successful business in photography, then transitions into finalizing a business plan, determining cost of production, price setting, determining operational costs, and return on investment.

BUSG 55018 Business Photography Advance 3.2 Credits
Explore the theoretical first year in a photography business. This course will also explore different marketing, advertising, and promotional strategies to potentially help a photography business be successful.

BUSG 55019 Professional Career Development 1.4 Credits
In this course, learners develop techniques and strategies for marketing themselves in their chosen fields. Emphasis will be placed on learners assessing their most marketable skills, developing a network of contacts, writing cover letters, résumés and thank you letters while preparing for their employment interview and developing a professional appearance, closing and follow-up. Learners will get instruction in building self-confidence, flexibility, what is realistic and what effort is required to perform a successful job search.

BUSG 55020 Emotional Intelligence 0.8 Credits
This course combines a self-assessment with a workbook and workshop to quickly identify emotional intelligence levels and provide a framework for discussion and growth. From new hires to senior managers, this tool can help anyone develop their emotional intelligence and improve their performance. It’s more than a measure of potential and performance; it’s a tool for true personal development.

BUSG 55021 Business Essentials for Photographer Certificate Program 8.8 Credits
San Jacinto College has established a program designed to give participants a solid foundation in the concepts, tools, and techniques required for becoming a self-employed professional photographer. San Jacinto College’s comprehensive certificate program is geared toward new and emerging photography studios and photographers who are seeking guidance in essential business and marketing skills. You will work on business and financial aspects of setting up a photography studio, financial and legal requirements for starting a photography business, personal skills and attributes needed for succeeding as a professional, hiring helpers/employees, pricing for profitability, and building a business image.

BUSG 55022 Business Principles 4.8 Credits
Prerequisite(s): Reading level 6 Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life (BUSI 1301)
BUSG 55023 Small Business Financing 4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook is required. This course focuses on understanding the financial structure of a small business. Topics include business financing, budgeting, record keeping, taxation, insurance and banking. (BUSG 1341)
BUSINESS (BUSI)

BUSI 1301 Business Principles 3 Credits (3 Lec, 0 Lab)
This course provides a survey of economic systems, forms of business ownership, and considerations for running a business. Students will learn various aspects of business, management, and leadership functions; organizational considerations; and decision-making processes. Financial topics are introduced, including accounting, money and banking, and securities markets. Also included are discussions of business challenges in the legal and regulatory environment, business ethics, social responsibility, and international business. Emphasized is the dynamic role of business in everyday life.
Prerequisite(s): Reading level 6
Course Type: Academic

BUSI 2301 Business Law 3 Credits (3 Lec, 0 Lab)
The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context.
Prerequisite: Reading level 7
Prerequisite(s): High school coursework in U.S. history and government, or equivalent. Reading level 7
Course Type: Academic

BUSI 2304 Business Communications 3 Credits (3 Lec, 0 Lab)
This is a study of the practical principles of word usage, language structure, and writing mechanics. Detailed attention is given to report writing and to the construction of letters concerned with sales, credits, collections, inquiries, adjustments, orders, recommendations, and applications for employment.
Prerequisite(s): Reading level 4
Course Type: Academic
BUSINESS MANAGEMENT (BMGT)

BMGT 1021 Intro. to Project Management 0.7-4 Credits
This study of the role of the supervisor examines managerial functions as applied to leadership, counseling, motivation, and human skills.
Course Type: Technical

BMGT 1301 Supervision 3 Credits (3 Lec, 0 Lab)
This course explains the basic theory and processes of communication skills necessary for the management of an organization's workforce.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 1305 Communications in Management 3 Credits (3 Lec, 0 Lab)
This course explains the basic theory and processes of communication skills necessary for the management of an organization's workforce.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 1309 Information and Project Management 3 Credits (3 Lec, 0 Lab)
This course focuses on the fundamentals of critical path methods for planning and controlling projects. Includes time/cost tradeoffs, resource utilization, stochastic considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 1313 Principles of Purchasing 3 Credits (3 Lec, 0 Lab)
This course focuses on the purchasing process as it is related to such topics as inventory control, price determination, vendor selection, supply chain management, negotiation techniques, and ethical issues in purchasing.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 1325 Office Management 3 Credits (3 Lec, 0 Lab)
This course covers systems, procedures, and practices related to organizing and planning office work, supervising employee performance, and exercising leadership skills.
Course Type: Technical

BMGT 1327 Principles of Management 3 Credits (3 Lec, 0 Lab)
This course focuses on the concepts, terminology, principles, theory, and issues relevant to management in organizations.
Course Type: Technical

BMGT 1331 Production and Operations Management 3 Credits (3 Lec, 0 Lab)
This course teaches fundamentals of the various techniques used in the practice of production and operations management, including location, design, and resource allocation.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 1341 Business Ethics 3 Credits (3 Lec, 0 Lab)
This course offers discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. It includes ethical corporate responsibility.
Course Type: Technical

BMGT 1344 Negotiations and Conflict Management 3 Credits (3 Lec, 0 Lab)
This course covers theories which aid in the diagnosis of interpersonal and intergroup conflict. The role of manager as negotiator, intermediary, and problem-solver.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 2303 Problem Solving and Decision Making 3 Credits (3 Lec, 0 Lab)
This course explains decision-making and problem-solving processes in organizations utilizing logical and creative problem-solving techniques. Application of theory is provided by experiential activities using managerial decision tools.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 2309 Leadership 3 Credits (3 Lec, 0 Lab)
This course explores leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles.
Prerequisite(s): Reading level 4
Course Type: Technical

BMGT 2368 Practicum (or Field Experience) 3 Credits (0 Lec, 21 Lab)
This course offers practical training and experience in the workplace supported by an individualized learning plan developed and documented by the employer, College, and student. This allows the student to apply classroom theories, concepts, and skills in a workplace environment. The student must be working 20 hours per week in a paid or unpaid position.
Prerequisite(s): Six hours of Business Management courses or approval of the program director, and Reading level 4
Course Type: Technical

BMGT 2369 BMGT 2369 Practicum - Business Administration and Management 3 Credits (0 Lec, 21 Lab)
This course offers practical, general workplace training and experience supported by an individualized learning plan developed by the employer, college, and students. The student must be working 20 hours per week in a paid or unpaid position.
Prerequisite(s): Six hours of Business Management courses or approval of the program director. Reading level 4
Course Type: Technical

BMGT 2382 Cooperative Education - Business Administration and Management, General 3 Credits (1 Lec, 20 Lab)
This course offers career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
Prerequisite(s): Reading level 4
Course Type: Technical
BMGT 35008 Introduction to Project Mgmt. 1.2 Credits
BMGT 35009 New Supervisors: Be Successful 1.8 Credits
BMGT 39008 Professional Development 0.3 Credits
BMGT 41000 Cashier Checker 1.6-4.8 Credits
BMGT 41001 Supervision 4.8-6.4 Credits
BMGT 41002 Principles of Retailing 4.8-4.8 Credits
BMGT 41003 Delegation 0.7-3.2 Credits
BMGT 41004 Workplace Critical Thinking 0.7-4 Credits
BMGT 41005 Communications in Management 4.8-4.8 Credits
BMGT 41006 Facilities Management 4.8-9.6 Credits
BMGT 41007 High Performance Work Teams 4.8-4.8 Credits
BMGT 41008 Introduction to Merchandising 4.8-4.8 Credits
BMGT 41009 Customer Relations 0.7-3.2 Credits
BMGT 41010 Conflict Management 0.7-3.2 Credits
BMGT 41011 Employee Performance Review 0.7-3.2 Credits
BMGT 41012 Principles of Management 1.6-6.4 Credits
BMGT 41013 Principles of Purchasing 4.8-4.8 Credits
BMGT 41014 Business Management 1.6-4.8 Credits
BMGT 41015 Basic Telemarketing: Skills f 1.6-4.8 Credits
BMGT 41016 Marketing/Merchandising 1.6-4.8 Credits
BMGT 41017 Advertising and Sales Promotion 1.6-4.8 Credits
BMGT 41018 Basic Supervision 1.6-6.4 Credits
BMGT 41020 Leadership Skills for Supv/Mgr 0.7-4 Credits
BMGT 41022 Interpersonal Communication Sk 1.6-6.4 Credits
BMGT 41023 Information and Project Manage 4.8-12.8 Credits
BMGT 41024 Total Quality Management, An 0 0.7-3.2 Credits
BMGT 41025 Office Management 4.8-4.8 Credits
BMGT 41026 Motor Pool Operations/Management 7-7 Credits
BMGT 41028 Public Relations 1.6-4.8 Credits
BMGT 41029 Quantitative Analysis for Orga 4.8-6.4 Credits
BMGT 41031 Production and Operations Mana 4.8-6.4 Credits
BMGT 41032 Principles of Salesmanship 0.8-4.8 Credits
BMGT 41033 Principles of Selling 4.8-4.8 Credits
BMGT 41036 Purchasing Management - Intro 1.6-4.8 Credits
BMGT 41040 Intermediate Project Mgmt 0.7-4 Credits
BMGT 41041 Business Ethics 4.8-6.4 Credits
BMGT 41042 Project Scope and Risk Management 4.8-12.8 Credits
BMGT 41043 Project Management 4.8-12.8 Credits
BMGT 41044 Negotiations and Conflict Mana 4.8-12.8 Credits
BMGT 41046 Advertising and Sales Promotion 4.8-4.8 Credits
BMGT 41047 Retail Buying 4.8-4.8 Credits
BMGT 41048 Marketing Research and Strateg 4.8-4.8 Credits
BMGT 41051 Purchasing Management - Interm 1.6-4.8 Credits
BMGT 41052 Vendor and Buyer Partnering 1.6-4.8 Credits
BMGT 41091 ST In Business Administration 0.7-11.2 Credits
BMGT 41092 Special Topics in Purchasing, 0.7-11.2 Credits
BMGT 55001 IT Project Management 2.4 Credits
Explore the world of project management by learning how to plan and control projects. Understand the project lifecycle, how to define deliverables, and identify resources. Textbook Provided
BMGT 55003 Tenets of Trust 0.7 Credits
Basic theory of communication skills as appropriate and applicable to individuals or groups in the business environment. Includes listening, speaking, writing, and communicating non-verbally.
BMGT 55004 Excelling as a First Time Supervisor 0.8 Credits
Making the move from Worker to Supervisor means that you are no longer responsible for doing the work; you are now responsible for getting the work done through others.
BMGT 55005 Managing Multiple Priorities, Objectives and Deadlines 0.8 Credits
You are constantly faced with competing deadlines. Set aside one day and you'll be able to manage multiple priorities and get more done in less time with practical, time-saving management techniques.
BMGT 55006 Measuring the Effectiveness of Your Sales Staff 0.8 Credits
A blueprint for developing a high energy, sales and service focused business filled with systems and techniques that will get your salespeople "causing" sales instead of just processing sales.
BMGT 55007 The Lessons of Leadership 0.8 Credits
Discover how to become a more effective, persuasive, and inspirational leader. Learn new ways to motivate, inspire and lead. This course is a must-attend event for all current or aspiring leaders.
BMGT 55008 Coaching, Mentoring and Team-Building Skills for Managers 0.8 Credits
Skills that will transform your work group into a team. Supplement your own managerial abilities with compelling coaching and counseling skills that will produce incredible productivity from your team as a unit.
BMGT 55009 Office Management 4.8 Credits
Learn systems procedures and practices related to organizing and planning office work. Study how employee performance can be maximized by exercising the leadership skills you will acquire. (BMGT 1325)
BMGT 55010 Supervision 4.8 Credits
Note: Textbook required Take an in-depth study of the role of supervisor. Study the managerial functions as they apply to leadership, counseling, motivation, and human skills. (BMGT 1301)
BMGT 55011 Principles of Management 4.8 Credits
Note: Textbook required Study to learn the concepts, terminology, principles, theory and issues that are the substance of the practice of management. (BMGT 1327)
BMGT 55012 Principles of Purchasing 4.8 Credits
Note: Textbook required Learn the purchasing process as it is related to such topics as inventory, control, price determination, vendor selection, negotiation techniques, and ethical issues. (BMGT 1313)
BMGT 55015 Building an Environment of Trust 0.8 Credits
Continue developing your leadership skills to help propel your team and organization to success. Learn to recognize behaviors that lead to distrust and to understand the human impact of a non-trusting environment. Grow and develop your staff to reach success.
BMGT 55016 New Leadership Tools 0.8 Credits
Develop a strategy and take on a leadership approach to accelerate success in this new role. In addition, learn to drive performance and accountability by helping people understand what is expected of them and gain their commitment to achieving it.
BMGT 55017 Communication and Conflict Resolution 0.8 Credits
Research shows that people screen out or misinterpret 70% of the messages to which they are exposed. Differences of opinion can quickly escalate into an out-and-out battle. That can cost your organization time, productivity, and money. This course teaches leaders how to recognize the escalation of conflict and provides meaningful essentials for communicating with others.

BMGT 55018 Developing High Performance Teams 0.8 Credits
Take responsibility for addressing unacceptable performance or work habits that impact others and the organization. Learn how to help employees do it themselves. Find help conducting effective improvement discussions and providing feedback and ongoing support need to improve performance. By helping others develop critical thinking skills to work through problems, ideas, and opportunities, leaders can focus on broader strategic issues while creating an environment in which high performers excel.

BMGT 55019 Essential Skills for Healthcare Managers 0.8 Credits
One of the most fundamental skills needed by managers proves to be the most challenging - being able to communicate with staff and others in an efficient and effective way to build commitment to take action and achieve results. This workshop helps managers learn to build involvement through the use of feedback and effective interaction skills. Also a critical leader's approach is taken to become a catalyst who sparks action in others.

BMGT 55020 Leading Rapid Change 0.8 Credits
You need to make change work by modeling and supporting the behaviors that help people adapt to change quickly and effectively. Recognize the behaviors that lead to distrust and to understand the impact of a non-trusting environment. Smart leaders view change as an opportunity and approach it with a positive mindset in order to build an environment that embraces change. Lead your team in building an environment of trust be ready for change.

BMGT 55021 Healthcare - Effective Teamwork 0.8 Credits
Healthcare is a growing industry where people work non-standard hours and often feel they lack sufficient resources. It’s essential to success that involvement, support, and information is shared among teams or work groups. Learn to focus staff on personal, interpersonal, and organizational advantages of working together effectively and efficiently.

BMGT 55022 Healthcare - Improving Staff Performance Parts 1 & 2 0.8 Credits
It’s up to the manager to immediately address performance or work-habit issues with employees. Failing to do so can have a devastating effect on the morale and the overall performance of the entire group. It’s not enough to have an initial discussion with a person to coach him or her on improving poor performance or work habits. Managers must follow up to ensure that progress is being made or to acknowledge the improvement. This workshop equips managers with the skills to help people put together improvement plans, conduct effective improvement discussions, and handle the challenges that might arise when doing so.

BMGT 55023 Managing the Performance of Others 1.6 Credits
As the manager, supervisor or leader of a work group, performance leaders help others do the work that ultimately makes an organization successful. The skills taught in this workshop help participants prepare for and conduct different types of performance-related discussions.

BMGT 55024 Maximizing Your Supervisory Potential 0.8 Credits
As a result of the business environment in which you operate, new, and even tenured, supervisors frequently find themselves performing an awkward and uncomfortable organizational balancing act. This workshop helps leaders strive to balance between multiple elements of their job responsibilities.

BMGT 55025 Production and Operations Management 4.8 Credits
Fundamentals of the various techniques used in the practice of production management to include location, design, and resource allocation. (BMGT 1331)

BMGT 55026 Transition Training for Internal Quality Auditors 2.4 Credits
Designed for internal auditors and audit teams, a detailed look at the process-oriented approach to the planning and conduct of audits.

BMGT 55027 How to Transition to ISO 9001:2000 0.8 Credits
A complete review of the transition, from the customer and process focus of ISO 9001:2000, to heightened management responsibility, and internal audit and documentation changes.

BMGT 55028 Accelerating Team Productivity 1.6 Credits
Today’s teams are expected to produce more than ever before, faster than ever before. As a result, this workshop is designed to help leaders focus teams on key results and outputs, and build energy and momentum toward achieving goals.

BMGT 55029 Coaching for Top Performance 1.6 Credits
Acquire the skills that help build constructive relationships, stronger commitment to improving performance and achieving results that make a difference for the organization.

BMGT 55030 Certified Medical Office Manager 2.4 Credits
Prerequisite(s): Two years of medical office experience recommended. This medical office management certification program focuses on the key aspects, concerns and roadblocks that confront the medical office manager/practice administrator. Learn how to deal with the issues that affect the financial, as well as the personnel requirements of the practice. Topics include: analyzing cost centers, overhead expenditures and controls, coding/insurance processing administration, minimizing malpractice risks, effective contract analysis, methods of compensation, how to determine an acceptable capitation rate, differences between HMO, IPA, MSO, PPO, and where your practice fits in. Includes the CMOM examination which is administered on the final class day. *This course of study prepares candidates to be certified. Candidates become “Certified” by passing the required certifying agency exam. Note: Course materials provided.

BMGT 55031 Root Cause Analysis for Practitioners 1.6 Credits
Interpreting data for effective problem solving and recommending corrective action. Emphasizes structured approaches to critical thinking and problem solving in the workplace.

BMGT 55032 PM - Project Management Certification Prep 3.5 Credits

BMGT 55033 Maritime Supervisory Skills 0.8 Credits

BMGT 55034 Root Cause Analysis Basics 0.8 Credits
Develop a working knowledge of root cause analysis methods. Provide problem solving strategies through classroom activity and study through identification of cause-effect evidence. Learn to identify cause-effect relationships so that issues may be eliminated prior to them having an opportunity to become major.
BMGT 55036 Interaction Skills Training 1.6 Credits
The Interaction Skill's Training will consist of 4 DDI Leadership modules. Those modules include Interaction Skills for Success, Valuing Differences, Working as a Team, and Communicating with Others. Some of the topics discussed include: interactions skills, reduction of misunderstandings; collaborative work, team success, improvement of team results, trust, and communication.

BMGT 55038 Safety-Related Leadership Training: Effective Bioastronautics Communication 0.8 Credits
This workshop is for employees who want to utilize positive, open, and effective communication in their professional lives. Participants will learn critical communication skills that will improve the quality of all workplace interactions.

BMGT 55039 Salesmanship 4.8 Credits (BUSI 1311)

BMGT 55040 Connecting With Others:Listening/Speaking 0.8 Credits
This course provides communication skills training using official Achieve Global curriculum, i.e., Listening in a Hectic World and Speaking to Influence Others. The content includes techniques to help individuals communicate more effectively and persuasively as well as to eliminate conflict in the workplace enabling participants to resolve office issues that negatively affect work performance.

BMGT 55041 Communication for Business Professional 0.8 Credits
This course provides basic communication skills training using official DDI curriculum, i.e., Interaction Skills for Success and Communicating with Others. The content includes techniques to enhance more effective and persuasive communication using a communication technique that will convey information without being overly passive or aggressive to others.

BMGT 55042 Planning and Critical Path Training 0.8 Credits
This course provides training on management of multiple projects and priorities using official DDI curriculum, i.e., Planning and Critical Path Training. The training content will consist of lessons designed to help supervisors and team leads evaluate project schedules more effectively.

BMGT 55043 Building Strategic Working Relationships 0.8 Credits
Basic principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, and the role of the individual in the team. The training will also include communication, gaining commitment, valuing diversity, adaptability, and building trust utilizing DDI’s Interaction Skills for Success module and the Valuing Differences module. Upon completion of this course, attendees will be able to utilize their skills to successfully build upon their team talents to better accomplish goals and tasks for job completion.

BMGT 55044 Getting Started as a New Leader 0.8 Credits
Introduces leadership to individuals moving up the ranks. This course arms new leaders with the knowledge and skills needed to confront the challenges associated with getting your footing and getting results more quickly-in your new leadership role. Learn how to focus time and efforts on tasks that are most important to the organization’s success. In addition, you will acquire a set of proven interaction skills, discover seven Leadership Imperatives for meeting today’s challenges, and realize your role as a catalyst leader-a leader who inspires others to act.

BMGT 55045 Strategic Leadership Techniques and Tools 4.8 Credits
Targeting first line managers to study the role of the supervisor. You will be introduced to concepts in leadership, counseling, motivation, and human skills. The training utilizes twelve DDI Leadership Modules.

BMGT 55046 Root Cause Analysis Practitioner (RCA Practitioner) 1.4 Credits
This course examines many of the common pitfalls used in problem solving and how to avoid them. Building on that knowledge, you learn how to clearly define any event-based problem and how to use the Apollo 4-step process to develop a causal understanding of that event and identify effective solutions. Use Reality Charting software to build cause and effect charts, prepare RCA reports and effectively communicate RCA findings. In addition, you will learn principles of gathering evidence, interviewing and facilitating an RCA as a team. RCA skills and knowledge are reinforced with many “hands-on” exercises that allow the lessons learned and methods to be applicable to real world problems. Upon successful completion of the course, you will be an Apollo RCA Practitioner.

BMGT 55047 Essentials for Leaders 0.8 Credits
This foundation course teaches leaders how to get results through people. During the course, they learn a set of essential skills to meet both practical business needs and people’s personal needs. Learners acquire a set of proven interaction skills, discover seven Leadership Imperatives for meeting today’s challenges, and realize their role as a catalyst leader-a leader who inspires others to act. Time Management techniques will also be taught to enable participants to get more done in less time with practical techniques.

BMGT 55048 Practical Bioastronautics Project Management 0.8 Credits
BMGT 55049 Achieving Results through Leadership 4.2 Credits
Instruction to provide quality training in Leadership and Management.

BMGT 55050 Bioastronautics Group Dynamics 0.8 Credits
Created as Aerospace Academy class.

BMGT 55051 Managing & Working with the Multigenerational Workforce 0.8 Credits

BMGT 55052 Interaction Skills for Success/Working as a Team 0.8 Credits
Student will be able to identify and apply the interpersonal skills, group dynamics and problem-solving skills to work as part of a team.

BMGT 55053 Safety Related Leadership Training: Bioastronautics Effective Meetings 0.8 Credits

BMGT 55054 Interaction Skills for Success 0.8 Credits

BMGT 55055 Leadership Coaching 1.6 Credits
This course teaches leaders how to get results through people. You will learn a set of essential skills to meet both practical business needs and people’s personal needs. You acquire a set of proven interaction skills, discover seven Leadership Imperatives for meeting today’s challenges, and realize your role as a catalyst leader-a leader who inspires others to act.

BMGT 55056 Change Management 0.8 Credits
This course focuses on leaders’ crucial role in effectively leading change initiatives in the workplace. Leaders learn how to introduce a change initiative and lead discussions with employees to explore how best to implement the changes. They also learn to help others overcome their resistance to change. These skills enhance a leader’s ability to minimize the potentially negative effects of change on morale, processes, and productivity.
**BMGT 55057** Effective Coaching Strategies 0.8 Credits
This course develops leaders who help people achieve their goals and avoid problems-a positive experience for themselves and those being coached. Leaders learn a proven coaching process- a continuous cycle that ensures they identify coaching opportunities, provide needed coaching and support, observe performance, and measure results until the desired outcomes are achieved. You will learn how coaching for success benefits individuals, strengthens work groups, and supports company objectives and priorities.

**BMGT 55058** Communication 0.8 Credits
Improving people’s interaction skills will improve the way your workforce thinks and acts. This course presents the basics on how to work together, reduce wasted time, lessen conflict, and influence interactions in a positive way.

**BMGT 55059** Managing Conflict 0.8 Credits
This course teaches you how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic- regardless of which stage a conflict is in. You also learn the true cost of conflict to an organization and techniques for handling even the most challenging conflict-related discussions effectively. This course also discusses how to manage conflict by dealing with differing ideas, interests, or perceptions.

**BMGT 55060** Leading to Achieve High Performance 0.8 Credits
This course provides team leaders with the tools and skills to perform three primary responsibilities - diagnose, coach, and reinforce - that support their team’s growth. Leaders learn to diagnose behaviors and conditions that limit team performance. They are equipped to assess team strength and weakness, as well as to use coaching and reinforcing skills to be a catalyst for high performance and continuous improvement.

**BMGT 55061** Strategic Communication: Communication Skills for Technical Professionals 0.8 Credits

**BMGT 55062** Leadership Tools I 1.2 Credits
This course provides leaders with the tools they need to help motivate members of a work group to be more effective, increase individual performance and ensure interaction success. This course also provides the tools for setting performance expectations, gaining commitment and handling challenging situations that may occur. Leaders will learn the tools that prepare them to coach others to reach the levels of productivity which benefits individuals, strengthens work groups, and supports company objectives and priorities.

**BMGT 55063** Leadership Tools II 1.2 Credits
This course provides leaders with the tools they need to effectively resolve workplace conflict and reduce the negative effects of conflict. Using effective performance tools, leaders will learn how to take appropriate action and minimize the impact of ongoing performance problems. Leaders will understand how progress reviews are a key business tool that will encourage good performance, build responsibility and gain improved performance results.

**BMGT 55064** Achieving Results through Leadership I 2.4 Credits
**BMGT 55065** Leading & Managing Change 0.8 Credits
**BMGT 55066** SRLT: Building & Leading a High Performance Team 0.8 Credits

**BMGT 55067** Time Management Essentials 0.7 Credits
Learn basic principles of time management and how to increase productivity with the effective use of Microsoft Outlook. The student will learn how to organize and access information quickly, thus, eliminating floating pieces of paper. The student will experience increased productivity, improved efficiency and reduced stress- all great reasons to learn how to manage time better.

**BMGT 55068** Aligning Performance for Success 0.8 Credits
Today’s organization requires strong leadership for survival. This leadership course is designed to prepare leaders and supervisors to manage effectively. Leadership, conflict resolution, visioning, goal setting and coaching are important components of successful leadership development. This course is designed for leaders and supervisors on all levels. The skills taught in this course can be applied immediately in the work environment.

**BMGT 55069** Time Management for Success 0.7 Credits
Learn time management techniques that will help you increase productivity, reduce stress and improve results. Control your use of time and make the best use of your personal energy. Set your priorities to increase your efficiency.

**BMGT 55070** Business Etiquette 0.7 Credits
Business etiquette is a combination of common sense and consideration for others that are the rules for professional behavior. This is the code of behavior that contributes to a more pleasant work environment. This can be a major contributor to your career success and a positive reflection on your organization.

**BMGT 55071** Fundamentals of Project Management - One Day 0.7 Credits
Successfully managing a project requires effective planning and adherence to the industry’s best practices in every step of the process. By understanding the fundamentals of project management, participants will be better prepared to initiate a project in your organization and position it for success. In this course, attendees will identify effective project management practices and their related processes.

**BMGT 55072** Leadership Cert, Level 1 3 Credits
**BMGT 55073** Leadership Mastery, Level 2 2.4 Credits

**BMGT 55074** Introduction to Project Management 0.7 Credits
Successfully managing a project requires effective planning and adherence to the industry’s best practices in every step of the process. By understanding the fundamentals of project management, participants will be better prepared to initiate a project in your organization and position it for success. In this course, attendees will identify effective project management practices and their related processes.

**BMGT 55075** Fundamentals of Project Leadership 0.7 Credits
This course will take an in-depth look at planning a project and the fundamentals of project leadership by examining the purpose and objective of project planning and the importance of developing and leading project teams. It will further put concepts into an understandable framework through the use of various project examples.
BMGT 55076  Effective Interaction & Decision Making Strategies  0.8 Credits
This course presents the basics on how to work well together, reduce wasted time, lessen conflict, influence interactions in a positive way, and accelerate the decision-making process when it is appropriate.

BMGT 55077  Effective Presentation and Time Management Strategies  1.6 Credits
The Presentation and Time Management course will include how to conquer your fear of public speaking, prepare and deliver a well-organized presentation, use new technology for effective visual aids, capture and maintain audience interest, learn techniques for improving your voice, time management principles and techniques, and avoiding wasted time.

BMGT 55078  SRLT: Generations in the Workplace  0.8 Credits

BMGT 55079  Cause Mapping I-Effective Root Cause Analysis  1.6 Credits
This course provides valuable problem-solving skills applicable within your organization. The Cause Mapping method is a simple, objective, evidence-based approach for breaking any issue into its cause-and-effect relationships so that everyone sees the same, accurate information.

BMGT 55080  SRLT: How to be a Confident Delegator  0.8 Credits
In this course, leaders overcome their hesitation for delegation by learning skills for successfully matching people, responsibility, and authority. This allows them to maximize involvement, productivity, motivation, and growth for individuals, groups, and the organization. The leaders learn a proven coaching process—a continuous cycle that ensures they identify coaching opportunities, provide needed coaching and support, observe performance, and measure results until the desired outcomes are achieved. They learn how coaching for success benefits individuals, strengthens work groups, and supports company objectives and priorities.

BMGT 55081  SRLT: Performance Management  0.8 Credits
This course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it. When leaders conduct effective setting expectations discussions, people feel more motivated to perform well because they see how their efforts make a difference.

BMGT 55082  SRLT: Conflict Resolution  0.8 Credits
This course also helps leaders drive performance and accountability by replacing the “dread” of performance reviews with the “human touch” that builds trusting relationships with the people who report to them. Leaders learn to conduct effective discussions that recognize people’s success and plan for their future development.

BMGT 55083  SRLT: Working Successfully in a Virtual Team  0.8 Credits
Learn introductory topics needed to effectively use Microsoft Project software in home and business situations. You will learn to create a new project plan, manage project tasks and resources. Finally you will learn to finalize a plan and set it as a baseline.

BMGT 55084  Strategic Leadership and Negotiation Techniques  2.2 Credits
Targeting first line managers to study the role of the supervisor. You will be introduced to concepts in leadership, counseling, motivation, and human skills. The training utilizes twelve DDI Leadership Modules. 1.Leading Change 2.Influential Leadership 3.Mastering Interaction Skills 4.Motivating Others 5.Effectie Negotiations

BMGT 55085  Root Cause Analysis for Facilitator  1.6 Credits
This course examines many of the common pitfalls used in problem solving and how to avoid them. Building on that knowledge, you learn how to clearly define any event-based problem and how to use the Apollo 4-step process to develop a causal understanding of that event and identify effective solutions. Use RealityCharting software to build cause and effect charts, prepare RCA reports and effectively communicate RCA findings. In addition, you will learn to principles of gathering evidence, interviewing and facilitating an RCA as a team. RCA skills and knowledge are reinforced with many "hands-on" exercises that allow the lessons learned and methods to be applicable to real world problems. Upon successful completion of the course, you will be an Apollo RCA Practitioner.

BMGT 55086  Lean Six Sigma Green Belt Hybrid  8 Credits
Six Sigma Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMIAC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis.

BMGT 55087  PM - The Triple Contraint-Managing Scope, Cost, and Schedule  1.4 Credits
Projects are successful if they are completed on schedule, within cost, and deliver the product or service the customer wants. Achieving this “triple constraint” requires effective planning, execution, and control. This course provides participants with a detailed understanding of each of these critical elements and their relationship with one another.

BMGT 55088  PM - Earned Value Project Management  1.4 Credits
Just like cockpit instruments aid a pilot in flying an airplane, Earned Value measurements are important in helping a Project Manager manage and control their project. In this course participants will learn the basic formulas for determining earned value, how to plan for and apply earned value techniques on a project, and how to determine and analyze variances.

BMGT 55089  PM - Effectively Managing Project Risks  1.4 Credits
There is risk in every project – some of it is negative risk (threats), and some of it is positive risk (opportunities). Being able to identify and evaluate project risks, establish effective plans to address them, and then responding quickly if they do occur is essential in order to meet the objectives of your project. This course teaches you techniques to manage and control risk so that there are “no surprises” to you, the project team, the customer, and other key stakeholders.

BMGT 55090  PM - Developing and Managing the Project Team  0.7 Credits
The most critical resource on any project are the project team members, and it is the responsibility of the project manager to establish and develop team members in order to increase project productivity, create an environment of trust and cooperation, and to effectively utilize the skills and talents at their disposal. Additionally, the project manager must be prepared to deal with conflict and disagreement and resolve these issues before they impact the project. Participants in this course will learn ways to create project teams, improve individual as well as team productivity, and to build an environment that is both stimulating and motivational.
BMGT 55091 PM - Delivering the "Right" Project Quality 0.7 Credits
This course introduces participants to the basic terms, concepts, and tools for defining, measuring, and managing quality, from the earliest efforts at quality assurance and quality control to the latest tools and techniques, including Total Quality Management (TQM) as well as Six Sigma and Lean Six Sigma. It will enable you to understand and work successfully with all aspects of Project Quality Management.

BMGT 55092 PM - Procuring and Managing Subcontractors 0.7 Credits
This course introduces participants to the various types of contracts and provides information to be considered when making decisions on whether to subcontract with outside sellers or suppliers. Special factors are discussed when the project team is planning and executing a competitive procurement with multiple other companies. The role, responsibilities, and accountability of a Subcontract Project Manager (SPM) are presented, as well as the roles and support you may need from your Legal, Procurement, and Contracts functions/departments throughout the subcontracting process.

BMGT 55093 PM - The Business of Project Management 0.7 Credits
Projects are done because they address a real need of the business—to gain market share, to enter a new market, ensure compliance with an updated regulatory statute, satisfy a customer request, etc. Additionally, projects continue to get more complex, involving strategic partner-ships, international companies and operating units, and greater pressure to minimize or eliminate ecological or environmental impacts. Project managers are expected to understand “the business”, and to make decisions that have wide-ranging and long term implications for their companies. This course explores the challenges facing project managers today and the professional skills and expertise needed to be successful in this ever-changing world.

BMGT 55094 PM - Advanced Project Management Topics 0.7 Credits
This course covers a number of advanced topics project managers should be knowledgeable about, including: Implementing a successful Project Management Office • Applying Project Management to Agile Projects • Recovering a project in trouble • What makes a good Project Manager great?

BMGT 55095 Performance Management 0.8 Credits
As the manager, supervisor or leader of a work group, performance leaders help others do the work that ultimately makes an organization successful. The skills taught in this workshop help participants prepare for and conduct different types of performance-related discussions.

BMGT 55096 Managing Performance Problems 0.8 Credits
This course focuses on leaders’ crucial role in effectively handling performance problems in the workplace. This course builds leaders skills in handling chronic performance or work-habit problems or serious misconduct. Learn how to effectively address challenges that might arise during discussions, learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations’ disciplinary policies and procedures.

BMGT 55097 Adaptive Leadership Strategies 0.8 Credits
This course raises leaders’ awareness of the differences among people and situations. You will learn how to enhance the effectiveness of your interactions by adapting their approach to people based on what they want to discuss and how they think people will respond. By better meeting the needs of each individual, leaders create higher levels of engagement and organizational results.

BMGT 55098 Influential Leadership Techniques 0.8 Credits
This course helps leaders get their good ideas heard, accepted, and enacted. You will learn influencing strategies and how to package ideas to gain the commitment of even the most skeptical coworkers and partners, and establishing alliances among work groups, management, customers and suppliers.

BMGT 55099 Fundamentals of Supervision 1.8 Credits
The Fundamentals of Supervision training will provide basic, practical training for supervisors, managers, business professionals, and team leaders. The goal is to enhance individual management skills and personal effectiveness in the work environment. This course will offer supervisors and other business professionals the opportunity to master the basic leadership skills that are essential for high productivity and continuing quality improvement.

BMGT 55100 Leading to Achieve Successful Teams 0.8 Credits
This course provides team leaders with the tools and skills of setting up a team charter, including goals, ground rules, and other important elements of a successful team. This course also teaches leaders a proactive, strategic process they can apply to leverage their leadership skills so that business objectives will be realized.

BMGT 55101 PMP Exam Review 3.5 Credits
This course is designed for prepare for Project Management Institute, Inc. (PMI®) Project Management Professional (PMP®) Certification.

BMGT 55102 PM - Project Management Certificate Program Fast Track 5.6 Credits
Learn critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude and project supervision.

BMGT 55103 Effective Motivating Strategies 0.8 Credits
In this course, leaders determine which factor(s) is “low,” and emerge with both the skills and a plan of specific actions to build group and individual motivation. Also This course develops leaders who help people achieve their goals and avoid problems—a positive experience for themselves and those being coached. Leaders learn a proven coaching process—a continuous cycle that ensures they identify coaching opportunities, provide needed coaching and support, observe performance, and measure results until the desired outcomes are achieved. You will learn how coaching for success benefits individuals, strengthens work groups, and supports company objectives and priorities.

BMGT 55104 Facilitating Change & Building Partnership Techniques 0.8 Credits
This course shows participants how to make change a positive experience for others by focusing people on a shared vision, building business partnerships, championing ongoing improvement, and creating an environment in which learning is encouraged. Also, participants identify their role in establishing alliances among work groups, management, customers and suppliers. Participants learn how to establish effective partnerships to meet customer needs by developing strategies for gaining people’s commitment to working together.

BMGT 55105 Problem Analysis & Decision Making Strategies 1.6 Credits
This workshop provides tools that enable leaders to solve problems proactively and gain others’ commitment to solutions and decisions. Leaders will make high-quality, effective decisions and learn to recognize how personal bias, tunnel vision, and marginal commitment influence decisions.
BMGT 55106 Rapid Decision Making Techniques 0.8 Credits
This course helps leaders accelerate the decision-making process yet still make quality decisions in fast-paced environments with limited time and information. They also learn how to determine when it is appropriate to use this approach and when to slow down the process and apply a more traditional, analytical approach.

BMGT 55107 Leadership Training for Basic Process Operators 2 Credits
Today's teams are expected to produce more than ever before, faster than ever before. As a result, this workshop is designed to help leaders focus teams on key results and outputs, and build energy and momentum toward achieving goals.

BMGT 55108 Apollo Root Cause Analysis Basic 0.8 Credits
This 1-day workshop provides students with the fundamental skills needed for using the Apollo method by covering the principles of how to clearly define an event-based problem, develop a causal understanding of that event, identify effective solutions and participate in a Practitioner-led Apollo RCA. Students learn how to effectively participate in each of the 4 steps of the Apollo process in order to improve the efficiency of the RCA team. Applied learning exercises allow students to learn how to establish problem value and create a common reality using the Apollo Cause & Effect chart. A knowledgeable RCA team significantly improves each RCA by enhancing the Practitioner’s ability to leverage the subsequent solutions and allowing the RCA team to focus specifically on the facts and less on opinions that often defer teams from reaching effective solutions. Training and skilled RCA participants are an important part of achieving those RCA outcomes. Upon successful completion of this course the student will be an Apollo RCA Participant.

BMGT 55109 Leadership: Facilitating Change 0.8 Credits
This course shows leaders how to make change a positive experience for others by focusing people on shared vision, building business partnerships, championing ongoing improvement, and creating an environment in which learning is encouraged.

BMGT 55110 Problem Analysis and Decisions Making 1.6 Credits
This course provides tools that enable leaders to solve problems proactively and gain others’ commitment to solutions and decisions. Leaders will make high-quality, effective decisions and learn to recognize how personal bias, tunnel vision, and marginal commitment influence decisions.

BMGT 55111 Leadership Skills for Managers Certification Program 2.4 Credits
This course gives you the keys to becoming a great leader and shows you how to put your new skills into action. Upon completing this program, you will have a better understanding of what it means to be a leader within your organization.

BMGT 55113 Online Certified Manager 6 Credits
The program is offered by San Jacinto College District in partnership with the Institute of Certified Professional Managers (ICPM), an educational institute at James Madison University and sponsor of the CM® certification. Through a comprehensive, 3-module program of training and assessment, ICPM certifies a level of management competency and leadership potential which is recognized worldwide by the Certified Manager® (CM) credential.

BMGT 55114 Leadership 4.8 Credits
Note: Textbook is required. Additional distance learning fees for online or hybrid course will be assessed at time of payment. This course is about the concepts of leadership and its relationship to management. It prepares the student with leadership and communication skills needed to motivate and identify leadership styles. (BMGT 2309)

BMGT 55115 The Leadership Challenge 1.6 Credits
The Leadership Challenge is about how leaders mobilize others to want to get extraordinary things done. It’s about the practices leaders use to transform values into actions, visions into realities, obstacles into innovations, separateness into solidarity, and risks into rewards. It’s about a climate in which people turn challenging opportunities into remarkable successes.

BMGT 55116 Branding Your Company 0.7 Credits
A comprehensive knowledge of branding for companies wanting to gain a competitive edge using fundamental business practices.

BMGT 55117 Reaching Agreement and Personal Empowerment 0.8 Credits
This course focuses on the dynamics of group agreement and the importance of having everyone's commitment of every group member. Also this course seeks to change the mind-set that empowerment is something that is given. It helps employees see that they can and should look for improvement opportunities.

BMGT 55118 PM - Project Management Hybrid Certificate Program 3 Credits
Critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, subcontractor considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.

BMGT 55119 Effective Communication Strategies 0.8 Credits
This foundational course provides individuals with a powerful set of interaction skills that enables them to communicate more effectively with colleagues and customers and, in the process, build trust, strengthen partnerships and achieve desired results. This course helps leaders save time and resources by leading meetings that support business needs. Leaders learn how to plan, facilitate, and follow-up on meetings (including virtual meetings) to ensure that there is a payoff for the time invested in meetings.

BMGT 55120 Lean Six Sigma Black Belt Week 1 5.6 Credits
Six Sigma Black Belt training prepares participants to solve a wide variety of difficult problems across a wide spectrum of industries (transactional, service, manufacturing, healthcare) drawing on both quantitative and qualitative methods from the complementary domains of Lean and Six Sigma. A Lean Six Sigma Belt is a process facilitator, natural leader, and astute problem solver who is a data-driven, bottom-line, agent for achieving complex project breakthroughs and for powering organizational change.

BMGT 55121 Lean Six Sigma Black Belt Week 2 5.6 Credits
Six Sigma Black Belt training prepares participants to solve a wide variety of difficult problems across a wide spectrum of industries (transactional, service, manufacturing, healthcare) drawing on both quantitative and qualitative methods from the complementary domains of Lean and Six Sigma. A Lean Six Sigma Belt is a process facilitator, natural leader, and astute problem solver who is a data-driven, bottom-line, agent for achieving complex project breakthroughs and for powering organizational change.

BMGT 55122 Quality Management 2 3.5 Credits
Completed PM Certificate Program or have equivalent experience.
BMGT 55123  Effective Decision Making Strategies  0.8 Credits
In today's fast-paced business environment, organizations need individuals who can make tough decisions in a timely manner. This course helps learners make better and faster decisions that will result in more effective performance. They learn how to gain the commitment of those whose support is needed to carry out decisions. Materials included.

BMGT 55124  CAPM Exam Prep  2.3 Credits
Less experience project practitioner looking to demonstrate your commitment to project management, improve your ability to manage larger projects and earn additional responsibility, and stand out to potential employers, the CAPM certification is right for you. CAPM Requirements: A secondary diploma(high school or the global equivalent), at least 1,500 hour experience or 23 hours of project management education by the time you sit for the exam. Materials provided.

BMGT 55125  PM-Project Management Online Certificate Program  1 Credit
Critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, subcontractor considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.

BMGT 55126  Business Ethics  4.8 Credits
Note: Additional distance learning fees for online or hybrid course will be assessed at time of payment. This course offers discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social justice in management practices and business activities. Review of ethical responsibilities and relationships between organizational departments, divisions, executive management, and the public. (BMGT 1341)

BMGT 55127  PM - Project Management Fundamental Certificate Program  7 Credits
Critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, subcontractor considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.

BMGT 55128  Managing Performance Problems/Building an Environment of Trust  0.8 Credits
This 1-day foundational leadership course builds leaders' skills in handling chronic performance or work-habit problems or serious misconduct. They learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations' disciplinary policies and procedures. Also, leaders learn how to avoid the trust breakers and take action to create an environment in which people take risks, identify and solve problems, and work together to create and sustain high levels of trust.

BMGT 55129  Essentials of Leadership & High Impact Feedback & Listening  0.8 Credits
This 1-day foundational leadership course teaches leaders how to get results through people and arms new leaders with the knowledge and skills they need to confront the challenges associated with getting their footing and getting results more quickly - in their new leadership role. During the course, they learn a set of essentials skills to meet both practical business needs and people's personal needs. Learners acquire a set of proven interaction skills, discover seven Leadership Imperatives for meeting today's challenges, and realize their role as a catalyst leader—a leader who inspires others to act. They also learn how to be receptive to feedback and to listen to accurately understand the speaker's intended message. In the workplace, these skills help them to optimize and sustain their own and their coworker's performance.

BMGT 55130  Adaptive Leadership & Developing Others  0.8 Credits
Adaptive Leadership raises leaders' awareness of the differences among people and situations. It teaches leaders how to enhance the effectiveness of their interactions by adapting their approach to people based on what they want to discuss and how they think people will respond. Also, this course provides leaders, coaches, and mentors with a practical process and the skills necessary to develop talent. It focuses on the leader's role before, during, and after the development plan.

BMGT 55131  Translating Strategy Into Results  1.6 Credits
Organizations are looking for leaders who can implement strategy from the middle. They need to identify execution priorities and management their time to ensure execution and sustainability. Leaders learn actions they can take to engage themselves and their team in executing priorities and how to overcome the challenges that interfere with effective strategy realization.

BMGT 55132  Cultivating Networks & Partnerships  1.6 Credits
Meeting critical business objectives requires knowing with whom to build strategic partnerships; how to leverage networks; and how to build and maintain internal and external relationships, leaders learn to evaluate their current network and take steps to close gaps in knowledge and perspectives, they identify personal and organizational barriers that hamper efforts to negotiate, collaborate, and communicate as they build relationships.

BMGT 55133  Developing Organizational Trust  0.8 Credits
Leaders play a key role in accelerating the growth of their teams, which results in more leaders and staff being prepared to deliver on critical business imperatives. Leaders learn to define the current state of team development as well as the ideal future state, pinpointing team and individual strengths and growth needs. They also need to know how to identify and develop high potentials for future leadership roles, assess the impact and effectiveness of development efforts, and provide feedback.

BMGT 55134  Driving Innovation  0.8 Credits
The need to innovate has always been important. However, as companies navigate through the new normal, it's one of the top business drivers and mandates we're hearing from clients. The pressure to find innovative solutions that result in competitive differentiation is tremendous. Leaders have to push their thinking and approach to meet these new requirements. We believe leaders don't have to be highly innovative themselves to drive a culture of innovation. In this course, we train leaders to use techniques that support innovation, employing a Human-Centered Design approach. By gaining experience with these techniques in an engaging classroom setting, leaders will be equipped to model ideal conditions for innovation and be a keeper of the culture that inspires and rewards their teams for coming up with and implementing new and differentiated solutions.
BMGT 55135 Setting Performance Expectations & Reviewing Performance Progress 0.8 Credits
This 1-day foundational leadership course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it. When leaders conduct effective setting expectations discussions, people feel more motivated to perform well because they see how their efforts make a difference. Also, leaders learn to drive performance and accountability by replacing the "dread" of performance reviews with the "human touch" that builds trusting relationships with the people who report to them. Leaders learn to conduct effective discussions that recognize people's success and plan for their future development.

BMGT 55136 Resolving Conflict & Delegating for Results 0.8 Credits
This course teaches leaders how to recognize that a conflict is escalating and minimize damage by using the most appropriate tactic—regardless of which stage a conflict is in. Leaders also learn the true cost of conflict to an organization and techniques for handling even the most challenging conflict-related discussions effectively. Also, leaders overcome their hesitation for delegation by learning skills for successfully matching people, responsibility, and authority. This allows them to maximize involvement, productivity, motivation, and growth for individuals, groups, and the organization.

BMGT 55137 Financial Skills for Non-Financial Employees 1.8 Credits
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

BMGT 55138 Leading High Performance Teams & Motivating Others 0.8 Credits
This 1-day foundational leadership course provides leaders with the tools and skills to perform three primary responsibilities—diagnose, coach, and reinforce those that support their team's growth. Leaders learn to diagnose behaviors and conditions that limit team performance. They are equipped to assess team strength and weakness, as well as to use coaching and reinforcing skills to be a catalyst for high performance and continuous improvement. Leaders also learn three factors that affect the motivation of employees—focused work, interpersonal support, and individual value. Leaders determine which factor(s) is "low," and emerge with both the skills and a plan of specific actions to build group and individual motivation.

BMGT 55139 Coaching for Success & Coaching for Improvement 0.8 Credits
This 1-day foundational leadership course teaches leaders how to help their people achieve their goals and avoid problems—a positive experience for them and those being coached. Leaders learn a proven coaching process—a continuous cycle that ensures they identify coaching opportunities, provide needed coaching and support, observe performance, and measure results until the desired outcomes are achieved. During the course, leaders learn a set of essentials skills to conduct effective improvement discussions, provide feedback and ongoing support people need to improve performance. Learners acquire a set of proven coaching skills, discover coaching imperatives for meeting today's challenges, and realize their role as a leader—leader who inspires others to act.

BMGT 55140 PM - Project Management Fast Track 5.6 Credits
Critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, subcontractor considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.

BMGT 55141 Leading Teams 2.4 Credits
The Leading Teams Certificate Program gives you the keys to becoming a great leader and shows you how to put new skills into action. Upon completing this program, you will have a better understanding of what it means to lead teams within your organization: the day-to-day interpersonal, teamwork, and business-results skills that help create and maintain a high-performance workplace.

BMGT 55142 Building Advanced Leadership Skills 2.4 Credits
The Building Advanced Leadership Skills Certificate Program gives you the keys to becoming a great leader and shows you how to put new skills into action. Upon completing this program, you will have a better understanding of what it means to be a leader within your organization: leading versus managing, thinking strategically, and developing employees.

BMGT 55143 Feedback Fundamentals/Communicating with Others 0.8 Credits
This course helps participant's use feedback to enhance their job performance, ensure their success and understand the impact of effective interaction skills. The course helps participant's view feedback as objective information about performance that can help them improve the way they work, to recognize and overcome communication barriers and interact effectively with others.

BMGT 55144 PMP Exam Prep Boot Camp 3.6 Credits
Prerequisite(s): Completed PM Certificate Program or have equivalent experience This course is designed to prepare the individual for Project Management Institute, Inc. (PMI®) and Project Management Professional (PMP®) Certification.

BMGT 55145 Lean Six Sigma Green Belt 8 Credits
Six Sigma Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMIAC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis. Materials provided

BMGT 55146 ASQ Certified ISO 9001:2008 Lead Auditor Training - Member 4 Credits
This course provides the framework to learn the full range of auditing skills that help you become an advocate in your company's effort to obtain maximum value from your commitment to ISO 9001:2008. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture-based learning.

BMGT 55147 ASQ Certified ISO 9001:2008 Lead Auditor Training - Non Member 4 Credits
This course provides the framework to learn the full range of auditing skills that help you become an advocate in your company's effort to obtain maximum value from your commitment to ISO 9001:2008. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture-based learning.
BMGT 55148 Business Analysis Essentials 2.1 Credits
In this introductory course, you'll delve into the role and responsibilities of the business analyst (BA) - the communication link between all business areas and a critical player in project success. Learn techniques for ensuring project success every step of the way from identifying and analyzing potential projects to making sure that the final project product meets the requirements you identified. Through hands-on exercises, you'll learn to define the scope of work and master requirements-gathering techniques that will work for a variety of projects and audiences. You'll consider the unique needs of customers, stakeholders, and the IT department as you work toward building, documenting, communicating, and managing requirements.

BMGT 55149 Certified Business Analysis Professional (CBAP) Prep Boot Camp 2.8 Credits
Business analysis is achieving worldwide recognition as a profession in its own right. The Certification of Competency in Business Analysis (CCBA) and Certified Business Analysis Professional (CBAP) designations are marks of distinction for intermediate- and advanced-level practitioners, recognizing that you have the knowledge and skills necessary for effectiveness and a professional level of competence in business analysis principles and practices. In this fun, challenging, and ultimately productive learning environment, our experts will share their knowledge and secrets for CBAP and CCBA certification success and help you upgrade yours. You will learn how to analyze and document your business analysis credentials and experience, submit a successful application for CBAP and CCBA certifications, and sanely and efficiently prepare for the exam. At the end of class, you'll be ready to pass either exam on your first try.

BMGT 55150 Competency in Business Analysis (CCBA) Prep Boot Camp 2.8 Credits
Business analysis is achieving worldwide recognition as a profession in its own right. The Certification of Competency in Business Analysis (CCBA) and Certified Business Analysis Professional (CBAP) designations are marks of distinction for intermediate- and advanced-level practitioners, recognizing that you have the knowledge and skills necessary for effectiveness and a professional level of competence in business analysis principles and practices. In this fun, challenging, and ultimately productive learning environment, our experts will share their knowledge and secrets for CBAP and CCBA certification success and help you upgrade yours. You will learn how to analyze and document your business analysis credentials and experience, submit a successful application for CBAP and CCBA certifications, and sanely and efficiently prepare for the exam. At the end of class, you'll be ready to pass either exam on your first try.

BMGT 55151 Time Management Skills 0.8 Credits
Do you find yourself overloaded with work? Feel so stretched to the limit you can't set priorities? Exhaust yourself daily without accomplishing your goals? Remember, every minute of your day impacts the business. If you answer yes to one or more of the above, it's time to make real choices about how and when to spend your time. This seminar gives you the tools to find balance, achieve your goals and be more effective and productive.

BMGT 55152 Quality 101 Fundamentals 1.6 Credits
The focus of this course is to acquaint the student with the basic concepts, terminology and tools of product quality used in manufacturing. The class explores the main areas quality encompasses, while gaining knowledge and tools that can be applied on the job immediately.

BMGT 55153 Information and Project Management 4.8 Credits
Prerequisite(s): None Note: Textbook required This course teaches the fundamentals of critical path methods for planning and controlling projects. Includes time/cost tradeoffs, resource utilization, stochastic considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude and project supervision. (BMGT 1309)

BMGT 55154 ASQ Certified Manager of Quality and Organizational Excellence (CMQ-QE) Member 2.4 Credits
San Jacinto College in partnership with ASQ chapter 1422 is offering The Certified Manager of Quality & Organization Excellence (CMQ/OE) designed to help the student understand the CMQ/OE Body of Knowledge for the ASQ certification exam.

BMGT 55155 ASQ Certified Manager of Quality and Organizational Excellence (CMQ-QE) Non-Member 2.4 Credits
San Jacinto College in partnership with ASQ chapter 1422 is offering The Certified Manager of Quality & Organization Excellence (CMQ/OE) designed to help the student understand the CMQ/OE Body of Knowledge for the ASQ certification exam.

BMGT 55156 PMP Exam Prep Plus Boot Camp 4 Credits
This course is designed to prepare the individual for Project Management Institute, Inc. (PMI®) and Project Management Professional (PMP®) Certification.

BMGT 55157 Taking the HEAT 0.8 Credits
Prerequisite(s): None Note: Material provided Even the best proactive customer service skills won't produce satisfied customers every time. Service providers need to be equipped with reactive skills, too. In this course, individual performers learn how to Take the HEAT in order to turn dissatisfied, angry customers into satisfied, loyal ones. In addition, these service providers must learn how to draw out dissatisfied customers who are reluctant to express their dissatisfaction.

BMGT 55158 ASQ Basics of Quality 1.6 Credits
San Jacinto College in partnership with ASQ chapter 1422 is offering Basics of Quality, a course for anyone who is interested in using quality principles in the workplace. This can serve as a foundational course for anyone who is new to quality. It also functions as a review course for someone who is seeking the ASQ Quality Improvement Associate Certification. Four domains will be covered – Quality Concepts, Team Basics, Continuous Improvement Techniques, and Customer-Supplier Relations.

BMGT 55159 ASQ Quality Improvement Associate Certification Exam Review 1.6 Credits
San Jacinto College in partnership with ASQ chapter 1422 is offering the ASQ Quality Improvement Associate Certification Exam Review course, designed to prepare students to take the ASQ Quality Improvement Associate Certification Exam. Students will be expected to spend additional time studying prior to taking the test. Four domains will be covered – Quality Concepts, Team Basics, Continuous Improvement Techniques, and Customer-Supplier Relations.
BMGT 55160 ASQ Quality Process Analyst Certification Exam Review 1.6 Credits
San Jacinto College in partnership with ASQ chapter 1422 is offering Quality Process Analyst Certification Review, a 16 hour course. This course will focus on the Body of Knowledge that will be covered in the ASQ exam. This course supplements the Basics of Quality course and will focus on data collection and analysis. Students are expected to spend additional time outside the classroom in personal study prior to the exam. Five domains will be covered – Quality Concepts and Tools, Problem Solving and Improvement, Data Analysis, Customer-Supplier Relations, and Corrective and Protective Action.

BMGT 55161 Root Cause Analysis for Leaders 1.6 Credits
Preprerequisite: None Note: Materials provided This course examines many of the common pitfalls used in problem solving. It also teaches RCA leaders how to avoid those pitfalls and how to successfully facilitate/mentor a team. Participants learn advanced skills and the key elements of an effective RCA program.

BMGT 55162 ITIL Foundation 2.4 Credits
In this exciting and dynamic course, you will get an introduction to the lifecycle of managing IT services to deliver to business expectations. Using an engaging case study, you’ll learn the core disciplines of ITIL best practices. Upon completing this course, you’ll be well positioned to successfully complete the associated ITIL exam required for entry into the future ITIL intermediate-level training courses. ITIL covers five core disciplines: Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement. These disciplines represent a structured approach to a service lifecycle framework that further enhances alignment to the business while demonstrating business value and ROI and enabling IT to solve specific operational needs.

BMGT 55163 Certified Manager Program - Module I 2.1 Credits
The Certified Manager Program is offered by San Jacinto College District in partnership with the Institute of Certified Professional Managers (ICPM), an educational institute at James Madison University and sponsor of the internationally recognized Certified Manager® (CM®) certification. CM certification distinguishes managers from their peers and provides a competitive edge in employee selection and advancement. Through a comprehensive, 3-module program of training and assessment, ICPM certifies a level of management competency and leadership potential which is recognized worldwide by the CM® professional credential. Module I - Management Fundamentals

BMGT 55164 Certified Manager Program - Module II 2.1 Credits
The Certified Manager Program is offered by San Jacinto College District in partnership with the Institute of Certified Professional Managers (ICPM), an educational institute at James Madison University and sponsor of the internationally recognized Certified Manager® (CM®) certification. CM certification distinguishes managers from their peers and provides a competitive edge in employee selection and advancement. Through a comprehensive, 3-module program of training and assessment, ICPM certifies a level of management competency and leadership potential which is recognized worldwide by the CM® professional credential. Module II - Planning & Organizing.

BMGT 55165 Understanding and Implementing Failure Mode and Effects Analysis (FMEA) 1.6 Credits
Defy the odds and eliminate failures by understanding the impact they can have on your company and how you can reduce the risk by effectively using Failure Mode and Effects Analysis. Emphasizing the practical approach to the FMEA process, this course focuses on the enhanced linkage between the design and process FMEAs, as well as the alternative methods in the new manual. Learn to identify the benefits of FMEA as a preventative tool for both design and process, in addition to gaining the skills to complete and apply a Design FMEA (DFMEA) and a Process FMEA (PFMEA). Instruction covers the FMEA Reference Manual, providing you with an awareness of FMEA responsibilities and the skills to apply FMEA to ISO/TS 16949.

BMGT 55166 Certified Manager Program - Module II 2.1 Credits
The Certified Manager Program is offered by San Jacinto College District in partnership with the Institute of Certified Professional Managers (ICPM), an educational institute at James Madison University and sponsor of the internationally recognized Certified Manager® (CM®) certification. CM certification distinguishes managers from their peers and provides a competitive edge in employee selection and advancement. Through a comprehensive, 3-module program of training and assessment, ICPM certifies a level of management competency and leadership potential which is recognized worldwide by the CM® professional credential. Module II - Planning & Organizing.

BMGT 55167 Basic Root Cause & Data Analysis Methodology Tools 2.4 Credits
Note: Materials Provided. This course is design to help Maintenance Engineers to evaluate equipment repair history or sudden failure facts to identify the root cause. This course builds the foundation of effective problem solving by providing intermediate knowledge and skills around Root Cause Analysis and provides practical instruction on the fundamental statistical tools used in modern process control methods. Course problems will be used to practiced the techniques developed.

BMGT 55168 Exemplar Global Certified ISO 9001: 2015 Lead Auditor Training 4 Credits
Prerequisite(s): None. Note: Materials provided. This course provides the framework to learn the full range of auditing skills that help you become an advocate in your company’s effort to obtain maximum value from your commitment to ISO 9001. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture based learning.

BMGT 55169 Job Readiness & Leadership Skills 4.8 Credits
Note: Hybrid in class (24 hrs); Online class (24 hrs) Leadership and its relationship to management. Prepares the student with leadership and communication skills needed to motivate and identify leadership styles. Outcomes: Determine individual leadership styles; distinguish differences between leadership and management; explain the effects of leadership style on organizational environment apply principles of leadership with individuals.

BMGT 55170 Certified ISO 9001:2015, 14001-2004 & OHSAS 18001:2007 Lead Auditor Training 4 Credits
This course provides the framework to learn the full range of auditing skills that help you become an advocate in your company’s effort to obtain maximum value from your commitment to ISO 9001:2015, 14001:2004, & 18001:2007 standards. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture based learning.
while specifically reviewing the behaviors expected of a ScrumMaster. You will gain a comprehensive understanding of the Scrum methodology and experience to class. Development and moving through the disciplines promoted by Scrum, you have learned in your own workplace right away. Every instructor has been periodically throughout the life of the project, absorbing change and new agile development process that allows teams to deliver usable software. Active learning exercises, and group collaboration. Each is designed to make it difficult to even establish project expectations. Scrum is the agile project management framework that supports this discipline, enabling teams to deliver high-quality software in a predictable and efficient manner. This class is a stimulating combination of class interaction, hands-on exercises, and group collaboration. Each is designed to make it difficult to even establish project expectations. Scrum is the agile project management framework that supports this discipline, enabling teams to deliver high-quality software in a predictable and efficient manner.

Moreover, projects that begin with changing or unclear requirements can be fraught with challenges. This course discusses how to manage conflict by dealing with differing ideas, interests, or perceptions. Leaders also learn how to avoid the trust breakers and take action to create an environment in which people take risks, identify and solve problems, and work together to create and sustain high levels of trust. Note: Materials provided. This foundational course provides individuals with a powerful set of interaction skills that enables them to communicate more effectively with colleagues and customers and, in the process, build trust, strengthen partnerships and achieve desired results. This course helps leaders save time and resources by leading meetings that support business needs. Leaders learn how to plan, facilitate, and follow-up on meetings (including virtual meetings) to ensure that there is a payoff for the time invested in meetings.

BMGT 55173 Leadership Skills for Supervisors Certificate Program 1.6 Credits
Note: Materials provided. This course gives you the keys to becoming a great leader and shows you how to put your new skills into action. Upon completing this program, you will have a better understanding of what it means to be a leader within your organization.

BMGT 55175 Agile Project Management 2.4 Credits
In this course, you will learn to improve your professional skills—a key ingredient to Agile success. Today's teams require vastly different leadership and management skills from Project Managers to truly achieve success. You can't simply tell everyone what to do. Instead, you need to be a strong coach, a change agent, and a very effective communicator. Agile is no longer a grassroots movement to change software development. PMI® is embracing Agile, recognizing the significant positive impact it has had on delivering better results for customers. This class is a stimulating combination of class interaction, active learning exercises, and group collaboration. Each is designed to allow you to learn through practice so you can readily apply what you have learned in your own workplace right away. Every instructor has been in the trenches as a project manager with Agile teams and will bring that experience to class.

BMGT 55176 Certified Scrum Master Workshop 1.4 Credits
Learn, understand, and execute on the three overarching principles behind Scrum: iterative development, self-management, and visibility. Even projects that have solid, well-defined project plans encounter some degree of change and waste. Shifting market conditions, budget cuts, staff restructuring, or any number of influences will disrupt the best plan while contributing to customer dissatisfaction and staff discouragement. Moreover, projects that begin with changing or unclear requirements make it difficult to even establish project expectations. Scrum is the agile development process that allows teams to deliver usable software periodically throughout the life of the project, absorbing change and new requirements as the project proceeds. Beginning with the history of agile development and moving through the disciplines promoted by Scrum, you will gain a comprehensive understanding of the Scrum methodology while specifically reviewing the behaviors expected of a ScrumMaster.

BMGT 55177 PMI-ACP (Agile Certified Practitioner) Exam Prep 2.1 Credits
The PMI-ACP credential recognizes your knowledge of agile principles, practices, tools, and techniques across agile methodologies. Prepare for the PMI Agile Certified Practitioner certification exam (PMI-ACP) through this three day, instructor led course. This course offers an in-depth look at agile project management through a PMI perspective, and is delivered in a combination of lecture and hands-on learning format.

BMGT 55178 PMI-SP (Scheduling Professional) Exam Prep 3 Credits
Prepare for the PMI Scheduling Professional (PMI-SP) certification exam through this four day, instructor led course. This course offers an in-depth look at project scheduling through a PMI perspective, and is delivered in a combination of lecture and hands-on learning format. In this boot camp style course, you will receive a comprehensive introduction to project scheduling and cover the five primary exam objectives. This prep course will utilize the 5th Edition of the PMBOK Guide Body of Knowledge.

BMGT 55179 Project Schedule and Cost Control 3 Credits
In this course, you will learn the skills you need to effectively establish and manage a realistic schedule and detailed budget. Through hands-on exercises, you'll learn to develop an integrated budget and schedule while monitoring project performance during execution. You will be introduced to analytical techniques, including creation of a work breakdown structure, network diagramming, dependency analysis, critical path determination, three-point estimating, and assessment of resource needs and availability. You will learn the management tools that help to ensure projects are delivered on time and within budget, as well as the importance of creating baselines for the project schedules and budgets. To communicate your project's progress to stakeholders, you'll learn to use earned value analysis and other reporting techniques. Hands-on exercises will demonstrate the mechanisms and importance of formal change control procedures.

BMGT 55180 Coaching for High Performance 1.6 Credits
Note: Materials provided. The program will include training in leadership, management, efficiency, coaching, developing team members and commitment utilizing a combination of training modules. Modules include Planning for Performance Discussions, Clarifying Performance Expectations, Correcting Performance Problems and Conducting Performance Reviews.

BMGT 55181 Conflict Management & Building and Sustaining Trust 1.6 Credits
This course teaches you how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic - regardless of which stage a conflict is in. You also learn the true cost of conflict to an organization and techniques for handling even the most challenging conflict-related discussions effectively. This course also discusses how to manage conflict by dealing with differing ideas, interests, or perceptions. Leaders also learn how to avoid the trust breakers and take action to create an environment in which people take risks, identify and solve problems, and work together to create and sustain high levels of trust.
BMGT 55182  Resolving Conflict through Building and Sustaining Trust  0.8 Credits
Note: Materials provided This course teaches leaders how to recognize that a conflict is escalating and minimize damage by using the most appropriate resolution tactic—regardless of which stage a conflict is in. Leaders also learn the true cost of conflict to an organization and techniques for handling even the most challenging conflict-related discussions effectively. This course also introduces Trust Builders, actions leaders can take to build and sustain trusting relationships, as well as common Trust Breakers that can erode or quickly break trust. Applying these skills to build trusting relationships enables people to take risks, identify and solve problems, and collaborate to achieve business results.

BMGT 55183  Setting Goals and Reviewing Results  0.8 Credits
Note: Materials provided This foundational leadership course helps leaders drive performance and accountability by helping people understand what is expected of them and gaining their commitment to achieving it. When leaders conduct effective setting expectations discussions, people feel more motivated to perform well because they see how their efforts make a difference. Also leaders learn to drive performance and accountability by replacing the "dread" of performance reviews with the "human touch" that builds trusting relationships with the people who report to them. Leaders learn to conduct effective discussions that recognize people's success and plan for their future development.

BMGT 55184  Project Management Principles  0.8 Credits
Note: Materials provided Participants will acquire the necessary skills to identify the overall framework of project management and learn techniques to plan, organize and control small to large projects within their departments.

BMGT 55185  Leading High Performance Teams  2 Credits
Prerequisite(s): None Note: Materials provided The program will include training in leadership, leading high performance teams, management, efficiency, coaching, developing team members, delegating, valuing differences, and commitment utilizing a combination of training modules to compile a 20-hour certificate program through the Leadership Institute at San Jacinto College. Upon completion of the training, attendees will be able to utilize their skills to successfully lead and manage work groups to the desired levels of increased performance.

BMGT 55186  Introduction to Leadership & Communication  0.8 Credits
This course teaches leaders the interaction essentials they need to handle the variety of challenges and opportunities they encounter every day in the workplace and beyond. They are introduced to three leadership differentiators that are most important to building a positive reputation as well as contributing to the organization's success.

BMGT 55187  Coaching Performing Teams  0.8 Credits
Effective coaching is one of the most important drivers of team member performance. By helping learners understand the importance of three coaching techniques and how to effectively handle both proactive and reactive coaching discussions, this course helps leaders have more effective and efficient interactions. This course teaches leaders how to recognize the signs of escalating conflict and take appropriate action to minimize damage. Leaders are introduced to two resolution tactics—coach and mediate—and practice using the Interaction Essentials as they coach then mediate to resolve a conflict.

BMGT 55188  Goals and Results with Trust  0.8 Credits
This course will show the positive effect of shifting the traditional role of planner and evaluator from the leader, to a shared responsibility between leader and employee. This shift builds employee ownership, and allows the leader to focus on coaching and developing throughout the performance cycle. Leaders will experience how to use effective (SMART) goals to help them and their employees track progress and fairly evaluate outcomes. A well-written performance plan is also a powerful tool for leaders to use when determining where to focus their development and coaching discussions with their employees. This course introduces Trust Builders, actions leaders can take to build and sustain trusting relationships, as well as common Trust Breakers that can erode or quickly break trust. Applying these skills to build trusting relationships enables people to take risks, identify and solve problems, and collaborate to achieve business results.

BMGT 55189  HH Construction Step-Up Supervisor  4 Credits
This course builds leaders' skills in handling chronic performance or work-habit problems or serious misconduct. They learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations' disciplinary policies and procedures.

BMGT 55190  PMDP Project Management Development Program  1.6 Credits
Prerequisite(s): None Note: Materials Provided Participants will acquire the necessary skills to identify the overall framework of project management and learn techniques to plan, organize and control small to large projects within their departments.

BMGT 55191  Conflict Resolution  0.8 Credits
Prerequisite(s): None Note: Materials provided While most leaders understand the need to delegate, they often hesitant to invest the time and effort up front. They need to be catalysts who transfer responsibility and authority to achieve key results and enhance the capabilities of their teams. In this course, leaders overcome their hesitation for delegation by learning skills for successfully matching people, responsibility, and authority. This allows them to maximize involvement, productivity, motivation and growth for individuals, groups, and the organization.

BMGT 55192  Leadership Training-The New Supervisor  1.6 Credits
Note: Materials Provided Values, ethics, principles, communication, leadership styles, cultural diversity, racial sensitivity, planning, and organizing. This course builds leaders' skills in handling chronic performance or work-habit problems or serious misconduct. They learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations' disciplinary policies and procedures.

BMGT 55193  Leadership Coaching - (Session 2)  0.8 Credits
Prerequisite(s): None Note: Materials provided Intensive training in the specific concepts and skills related to general business/leadership functions. This course was designed to be repeated multiple times if content varies. Identify business principles, current issues, or topics in general business/leadership.

BMGT 59005  Case Studies/Spec.Topics(Net)  2.4 Credits
BUSINESS MANAGEMENT (HRPO)

HRPO 1311 Human Relations 3 Credits  (3 Lec, 0 Lab)
This course teaches practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment.
Course Type: Technical

HRPO 2301 Human Resources Management 3 Credits  (3 Lec, 0 Lab)
This course teaches behavioral and legal approaches to the management of human resources in organizations.
Course Type: Technical

HRPO 2303 Employment Practices 3 Credits  (3 Lec, 0 Lab)
This course is a study of employment issues including techniques for human resource forecasting, selection, and placement including interview techniques, pre-employment testing, and other predictors. Topics include recruitment methods, the selection process, Equal Employment Opportunity (EEO), EEO recordkeeping, and Affirmative Action Plans. Prerequisite(s): Reading level 4
Course Type: Technical

HRPO 35004 Human Relations 4.8 Credits
HRPO 41001 Customer Relations 4.8-6.4 Credits
HRPO 41002 Human Resource Training and De 4.8-9.6 Credits
HRPO 41004 Employment Law 0.7-2.4 Credits
HRPO 41005 Management and Labor Relations 4.8-4.8 Credits
HRPO 41006 Basic Mediator Training 3.2-6.4 Credits
HRPO 41011 Human Relations 4.8-4.8 Credits
HRPO 41041 Personnel Management 1.6-6.4 Credits
HRPO 41091 Special Topics in Human Resour 0.7-11.2 Credits
HRPO 41092 Special Topics in Labor/Person 0.7-11.2 Credits
HRPO 41093 Special Topics in Organization 0.7-11.2 Credits
HRPO 42001 Human Resources Management 4.8-4.8 Credits
HRPO 42002 Trainer Skills for Human Resou 4.8-9.6 Credits
HRPO 42003 Employment Practices 4.8-6.4 Credits
HRPO 42004 Employee Relations 3.2-6.4 Credits
HRPO 42005 Human Resources Information Sy 4.8-9.6 Credits
HRPO 42006 Benefits and Compensation 4.8-6.4 Credits
HRPO 42007 Organizational Behavior 4.8-4.8 Credits
HRPO 55000 Human Resources Management 4.8 Credits
Prerequisite(s): None Note: Textbook is required. Study behavioral and legal approaches to the management of human resources in organizations. (HRPO 2301)

HRPO 55001 Human Relations 4.8 Credits
Note: Additional distance learning fees for online or hybrid course will be assessed at time of payment. Textbook Required. Learn practical application of the principles and concepts of the behavioral sciences to interpersonal relationships in the business and industrial environment. (HRPO 1311)

HRPO 55002 Train the Trainer 1.2 Credits
Current training and development programs. Emphasizes tools that help identify the types of learners and methods to successfully address different learning styles. Explores information to help managers with effective coaching methods, employee empowerment, and effective delegation.

HRPO 55003 Train the Trainer 0.8 Credits
Current training and development programs. Emphasizes tools that help identify the types of learners and methods to successfully address different learning styles. Explores information to help managers with effective coaching methods, employee empowerment, and effective delegation.

HRPO 55004 Instructor Training Workshop 1.6 Credits

HRPO 55005 Essentials of Human Resource Management 1.6 Credits
This course is offered in partnership with SHRM, the Essentials of Human Resource Management course provides an overview of the human resource function and covers real-life HR issues and today's most vital and timely topics, including employee law, selecting qualified employees, compensation, orientation and training, and the employee performance process. If you are new to HR or simply want to strengthen your employee management skills, the SHRM Essentials of Human Resource Management course is for you. Knowledge of the essentials can make you a better manager, protect your company from needless litigation, and help advance your career.

HRPO 55006 Training Employees for On-the-Job Success 0.8 Credits

HRPO 55007 ISO 9001:2000 Developing Employee Training 0.8 Credits
Learn the skills required to assess the need for training for your employees in order to implement ISO 9001:2000. Then learn how to develop, deliver and evaluate the training that is needed. Create a training action plan and gain training experience with practice training sessions.

HRPO 55008 HR - Understanding Training & Development Functions in HR 1.4 Credits
This course will present an overview of training and development, with emphasis on targeting training to organizational goals and mission, budgeting, assessment, design, delivery, evaluation, and training justification. Topics include: need analysis, adult learning principles, and instructional techniques.

HRPO 55009 HR - Employee Benefits Overview 1.4 Credits
This course explores the various forms of indirect employee compensation commonly referred to as benefits that employers use to attract, recognize and retain workers. It includes designing and administering benefits such as paid leave, insurance, retirement income and various employee services, as well as various benefits mandated by federal, state or local laws and regulations.

HRPO 55010 HR - Legal Issues 1.4 Credits
This course is a detailed introduction to federal and state employment laws. Instruction includes workplace discrimination; the role and purpose of the EEOC, affirmative action, privacy rights, wage and hour issues, and employment-at-will theory, strategies for applying legal theories and modeling lawful behavior in the workplace.

HRPO 55011 HR - Compensation Perspectives 1.4 Credits
This course surveys the development and administration of sound wage and salary structures. Topics include an in-depth explanation of the cash compensation function beginning with a thorough understanding of Fair Labor Standards Act determining exempt and non-exempt nuances, job evaluation methods, job description writing techniques, survey practices, and wage and salary structure development.
HRPO 55012 HR - Employee Relations/Performance Management 1.4 Credits
This course stresses instituting stretch goals, communicating performance expectations, measuring performance objectively and regularly, and providing candid, honest feedback on a regular basis.

HRPO 55013 HR - Introduction to Human Resources Management 0.7 Credits
This course will present an overview of Human Resource Management by examining the purpose and objective of Human Resource Management. It will further put concepts into an understandable framework by surveying the major Human Resource functions and their associations within the field. This course is designed for individuals who want to launch a career in Human Resources or need a comprehensive update of challenges facing today’s organizations.

HRPO 55014 HR - Recruitment and Selection 1.4 Credits
This course will present techniques for human resource selection and placement including hiring skills and tools focusing on position analysis and review, skill identification, market pricing, interviewing strategies, testing and legal considerations. Recruitment methods will be presented as well as current laws and legal considerations affecting selection and placement. Special focus includes techniques to reduce culturally-biased hiring practices and improve culturally-sensitive interviewing.

HRPO 55015 HR - Employee Safety and Security 1.4 Credits
This course deals with both enterprise and employee safety and security. It includes the organization's efforts to prevent and/or mitigate loss, risks to or from personnel, threats to its physical assets, damage to its technology and intellectual property, or risks of any other kind arising from all elements surrounding the work environment.

HRPO 55016 PHR/SPHR Exam Prep (NonMember) 3.8 Credits
Major concepts, theories, and their applications to prepare for the Professional Human Resources (PHR) Certification Exam or the Senior Professional Human Resource (SPHR) Certification Exam. Includes functional areas of human resource management such as management practices, general employment practices, staffing, human resources development, compensation and benefits, employee and labor relations, health, safety, and security.

HRPO 55017 Expert On-the-Job Training 1.4 Credits
This course is designed to develop sustainable learning through a system that provides the skills, strategies and tools to ensure immediate improvement in on-the-job performance by designing, developing and implementing a structured on-the-job training program. The focus is on performance; targeting relevant results metrics like eliminating waste, improving employee retention and increasing value stream productivity.

HRPO 55018 PHR/SPHR Certification Workshop (NonMember) 2.1 Credits
Major concepts, theories, and their applications to prepare for the Professional Human Resources (PHR) Certification Exam or the Senior Professional Human Resource (SPHR) Certification Exam. Includes functional areas of human resource management such as management practices, general employment practices, staffing, human resources development, compensation and benefits, employee and labor relations, health, safety, and security.

HRPO 55019 Practice Test & HR Review for PHR/SPHR - Non Member 2 Credits
This course starts with a 4-hour practice test followed by two 8-hour sessions of intense review in final preparation to take the PHR,SPHR exam.

HRPO 55020 Human Resources Fast Track 8 Credits
The course combines the following courses: 1) HR Legal Issues; 2) Compensation Perspectives; 3) Employee Benefits; 4) Performance Management; 5) Recruitment and Selection; 6) Safety and Security; 7) Understanding Training.

HRPO 55021 Essential Interviewing Skills 0.8 Credits
The Essential Interviewing Skills course teaches participants how to interview for the behaviors, knowledge, and motivations that are needed to be successful in a job.

HRPO 55022 HR - Human Resources Fast Track Certificate Program 8 Credits
Prerequisite(s): None. Note: Textbook is required. This course covers the evaluation of the current methods of job analysis, recruitment, selection, training/development, performance management, promotion and separation. Topics also include ethical, social, and legal responsibilities, the assessment methods of compensation and benefits planning and analysis of the role of strategic human resource planning in support of organizational mission and objectives.

HRPO 55023 HR - Recent ADA Changes 0.8 Credits
This course will present an overview of the new ADA regulation changes. Recently the United States celebrated 21 years of enactment and with the excitement comes change. President Obama added recent changes that affect federal employers and working employees in a number of industries. Are you prepared for these changes in your workplace?

HRPO 55024 Employment Law 0.8 Credits
Overview of laws and legal issues related to employment practice.

HRPO 55026 PHR/SPHR Exam Prep (Member) 3.8 Credits
Major concepts, theories, and their applications to prepare for the Professional Human Resources (PHR) Certification Exam or the Senior Professional Human Resource (SPHR) Certification Exam. Includes functional areas of human resource management such as management practices, general employment practices, staffing, human resources development, compensation and benefits, employee and labor relations, health, safety, and security.

HRPO 55027 SAP Human Resources 5.6 Credits
Prerequisite(s): Essential SAP Skills Note: All lessons and materials are online. You will have access to the materials after the class is over for an extended period of time. This course teaches the most common end user functions in SAP’s Human Resources (HR) module. It will begin with an overview of the Human Resources interface of SAP. Then you will learn to perform personnel management tasks, recruitment, reporting and authorizations. You will progress to Organizational Management and Organizational reporting. Learn to work with positions, jobs, standards HR transactions like hiring, retiring, promoting, and salary raises. Next, you will learn the basics of performing payroll tasks in SAP. You will conclude with the fundamentals of maintaining your own employee data, enrolling in benefits, reviewing pay slips and compensation statements, requests leaves and review time statements.

HRPO 55028 HR - Virtual Human Resources Certificate Program 10.5 Credits
This virtual course covers the evaluation of the current methods of job analysis, recruitment, selection, training/development, performance management, promotion and separation. Topics also include ethical, social, and legal responsibilities, the assessment methods of compensation and benefits planning and analysis of the role of strategic human resource planning in support of organizational mission and objectives. Textbook required.
HRPO 55029  HR - Online Human Resources Fast Track Certificate Program  8 Credits
Prerequisite(s): None  Note: Textbook is required. This online course covers the evaluation of the current methods of job analysis, recruitment, selection, training/development, performance management, promotion and separation. Topics also include ethical, social, and legal responsibilities, the assessment methods of compensation and benefits planning and analysis of the role of strategic human resource planning in support of organizational mission and objectives.

HRPO 55030  Qualified to apply for the PHR/SPHR Certification Exam  2.1 Credits
Prerequisite(s): Qualified to apply for the PHR/SPHR Certification Exam
Major concepts, theories, and their applications to prepare for the Professional Human Resources (PHR) Certification Exam or the Senior Professional Human Resource (SPHR) Certification Exam. Includes functional areas of human resource management such as management practices, general employment practices, staffing, human resources development, compensation and benefits, employee and labor relations, health, safety, and security.

HRPO 55031  SAP HR  4.8 Credits
This course will cover most of the HR roles - Organizational Management (OM), Time Management (TM), Personnel Administration (PA) and Payroll (PY). Upon successful completion of this course, students will have enough qualifications, both in terms of knowledge and also proficiency in SAP to exceed job market expectations. This course is carefully designed to develop skills which are most in demand. The hands-on training methodology ensures long lasting learning experience. Students will be able to setup organizational structures, create positions, assign tasks to the position. From PA they will be able to manage employee data in SAP, properly hire and fire employees, and make changes as and when they occur. From Time Management area, students will be able to record the time, quotas and will be able to create or edit work schedules. And last but not least, they will be able to run payroll and generate various business reports.

HRPO 55032  HR Certificate Program-Hybrid  8 Credits
Prerequisite(s): None. Note: Textbook required. This course covers the evaluation of the current methods of job analysis, recruitment, selection, training/development, performance management, promotion and separation. Topics also include ethical, social, and legal responsibilities, the assessment methods of compensation and benefits planning and analysis of the role of strategic human resource planning in support of organizational mission and objectives. Textbook required.

HRPO 55033  Practice Test & HR Review for PHR/SPHR - Member  2 Credits
Prerequisite(s): Qualified to apply for the PHR/SPHR Certification Exam
Note: Materials provided This course starts with a 4-hour practice test followed by two 8-hour sessions of intense review in final preparation to take the PHR/SPHR exam.
BUSINESS MANAGEMENT (MRKG)

MRKG 1302 Principles of Retailing 3 Credits (3 Lec, 0 Lab)
This course is an introduction to the retailing environment, types of retailers, current trends, the employment of retailing techniques, and factors that influence retailing.
Course Type: Technical

MRKG 1311 Principles of Marketing 3 Credits (3 Lec, 0 Lab)
This course is an introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues.
Course Type: Technical

MRKG 2312 E-Commerce Marketing 3 Credits (3 Lec, 0 Lab)
This course explores electronic tools utilized in marketing with a focus on marketing communications in developing customer relationships.
Course Type: Technical

MRKG 2333 Principles of Selling 3 Credits (3 Lec, 0 Lab)
This course is an overview of the selling process. Identification of the elements of the communication process between buyers and sellers is discussed as well as examination of the legal and ethical issues of organizations which affect salespeople.
Course Type: Technical

MRKG 35002 Customer Relations 0.7 Credits
General principles of customer service including skills, knowledge, attitudes, and behaviors. LEARNING OUTCOMES: Explain the importance of teamwork in an organization; explain internal and external customer relationships; communicate in a clear and professional manner; and discuss how to diffuse conflict. Identify customer service and professional ethics problems that plague the workplace; Apply basic principles of effective customer service and professional ethics in the workplace; participate will learn how to build effective relationships with external and internal stakeholders; participants will learn how to control personal behavior to prevent common problems associated with external and internal stakeholders; and participant will learn how to use a personal action to gain maximum performance in the workplace.

MRKG 55001 Marketing Techniques 0.7 Credits
This course prepares and organization to analyze itself and all the components of the business environment, then develop an approach to the market to ensure that the product sells.

MRKG 55002 Principles of Selling 0.8 Credits
This course is an overview of the selling process. Identification of the elements of the communication process between buyers and sellers is discussed as well as examination of the legal and ethical issues of organizations which affect salespeople.

MRKG 55003 Fundamental Selling Techniques for the New or Prospective Salesperson 1.4 Credits
Start your sales career the right way—with this intensive introduction to selling. Because of the mounting pressure facing salespersons in today's tough economy, this challenging profession is becoming even more competitive. But many prospective sales professionals don't have a solid foundation and understanding of the fundamentals of selling. This intensive, highly interactive two-day introduction to the art of selling will equip you with the tools and techniques you need to achieve sales success and improve your performance.

MRKG 55004 E-Commerce Marketing 4.8 Credits
Prerequisite(s): None This course explores electronic tools utilized in marketing with a focus on marketing communications in developing customer relationships. (MRKG 2312)
BUSINESS OFFICE TECH
(MRMT)

MRMT 1307 Medical Transcription I 3 Credits (3 Lec, 1 Lab)
This course teaches the fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. The course utilizes transcribing and information processing equipment compatible with industry standards, and is designed to develop speed and accuracy.
Prerequisites or Co-requisite(s): HPRS 1106 and 1271

Course Type: Technical

MRMT 41002 Medical Transcription 1.6-4.8 Credits
MRMT 41003 Medical Office Procedures 3.2-9.6 Credits
MRMT 41007 Medical Transcription Fundamen 4.8-12.8 Credits
MRMT 41011 Computers in Health Care 3.2-9.6 Credits
MRMT 41092 Special Topics in Medical Tran 0.7-11.2 Credits
MRMT 42033 Advanced Medical Transcription 4.8-12.8 Credits
MRMT 55000 Medical Transcription Introduction 4.8 Credits
Prerequisite(s): Medical Terminology and word processing skills. Learn the fundamentals of medical transcription with hands-on experience in transcribing actual physician dictation. This class is designed to develop speed and accuracy. (MRMT 1307).
**BUSINESS OFFICE TECH (POFI)**

**POFI 1001 Digital Literacy-IC3 9.6 Credits**
Learn to use a computer in a business environment. Begin with the keyboard; learning typing skills. Then get an introduction to the computer hardware. Learn how to use the operating system. Gain an understanding of some basic business applications - MS Word, MS Excel and PowerPoint. Additionally, learn to use the internet and email. You are now prepared to take the optional IC3 certification exam.

**POFI 1004 Intro to Microsoft Office 4.5 Credits**

**POFI 1341 Computer Applications II 3 Credits (3 Lec, 1 Lab)**
This course is a continued study of current computer terminology and technology that provides advanced skill development in computer hardware, software applications, and procedures. Prerequisite(s): BCIS 1305

Course Type: Technical

**POFI 1349 Spreadsheets 3 Credits (3 Lec, 1 Lab)**
Intermediate-level instruction includes in-depth coverage in the use of spreadsheet software for business applications. Topics include worksheet creation, modification, and graphics. Course Type: Technical

**POFI 35001 Computer Job Skills 8.4 Credits**

**POFI 41001 Computer Applications I 6.4-12.8 Credits**

**POFI 41002 Data Entry Skill Development 1.6-3.2 Credits**

**POFI 41003 Word Processing Fundamentals 1.6-3.2 Credits**

**POFI 41024 MS Excel - Begin to Intermediate 0.7-4 Credits**

**POFI 41041 Computer Applications II 4.8-8 Credits**

**POFI 41049 Spreadsheets 6.4-12.8 Credits**

**POFI 41091 Special Topics in Information 0.7-11.2 Credits**

**POFI 42001 Word Processing 6.4-12.8 Credits**

**POFI 42031 Desktop Publishing for the Office 6.4-12.8 Credits**

**POFI 55002 Word-One Day 0.7 Credits**
Prerequisite(s): Basic computing skills Textbook is required; flash drive is recommended. Learn the basics of Word in this fast-paced course and be able to create and edit a simple document, format text and paragraphs, add tables, headers and footers, create envelopes, numbered and bulleted lists. Finally you will learn to work with the proofreading tools of Microsoft Word.

**POFI 55005 Word-Intermediate Skills 1.6 Credits**
Prerequisite(s): Word - Basic Skills or equivalent knowledge. Note: Textbook required, flash drive recommended. First, you will go over how to illustrate documents with graphics. You will learn to insert, position, size and scale a graphic. You will learn to create a text box, WordArt and draw shapes. Next, you will move on to working with themes and building blocks where you will learn to insert a sidebar and Quick Parts. Then you will learn about merging Word documents and developing multipage documents. You will understand mail merge as you create a main document, design a data source, enter, and edit records. You will add merge fields, merge data and create labels. You will wrap up the course with how to work with styles, documents, and references.

**POFI 55006 Word - Advanced Skills 1.6 Credits**
Prerequisite(s): Word - Intermediate Skills or equivalent knowledge. Note: Textbook required, flash drive recommended. Become an Expert User in Microsoft Word 2010. You will first discuss how to integrate Word with other programs. You will embed hyperlinks, an Excel spreadsheet and an Excel chart; a PowerPoint slide; and a table from Access. You will then have an introductory unit on exploring advanced graphics. You will gain skills to create and modify screenshots, remove the background from a picture, create SmartArt graphics and edit clipart. From there you'll move into the different aspects of the application such as building forms. You will then go over how to collaborate with coworkers. You will track changes, manage reviewers and sign a document. You will wrap up the course with how to customize Word by adding watermarks, page borders and saving in alternate file formats.

**POFI 55007 Word - Basic Skills 1.6 Credits**
Prerequisite(s): Windows for the Desktop or equivalent knowledge Note: Textbook is required; flash drive is recommended. In this course, you will work with Word, a powerful application to create and format documents. You will begin with preparing and editing techniques. You will learn how to format, save and print a document. You will be using fonts, keyboard shortcuts, manipulating tabs, cut, copy, and paste text. You will learn page setup margins, page orientation, inserting page numbers, page breaks, headers, footers, date, time, symbols and other images. You will learn to create tables, populating and formatting them. You must be able to type. Begin to acquire skills and knowledge needed to pass the optional MOS Core certification exam in Word.

**POFI 55009 Word: One Day-Intermediate 0.7 Credits**
Prerequisite(s): Windows for the Desktop or equivalent knowledge; Word: One Day or equivalent knowledge Note: Textbook is required, flash drive is recommended. This fast-paced course will provide the concepts and skills to use some more advanced features of Microsoft Word including enhanced formatting, references, editing, and sharing, and saving to various formats. You will add character to your documents as you learn to apply custom themes, shapes, paragraph styles, references and hyperlinks. Finally, you will learn to protect your document.

**POFI 55011 Computer Applications II 4.8 Credits**
Gain advanced skill development in computer hardware, software applications, and procedures. (POFI 1341)

**POFI 55012 Spreadsheets 6.4 Credits**
Study in-depth the use of spreadsheet software focusing on business applications, including graphics and macro programming database functions. (POFI 1349)

**POFI 55013 Word Processing 6.4 Credits**
Study in-depth the use of word processing software focusing on business applications, including editing to produce business documents. (POFI 2301)

**POFI 55014 Desktop Publishing 6.4 Credits**
This course emphasizes layout techniques, graphics, multi-page displays, and business applications. (POFI 2331)

**POFI 55015 Intermediate Word 0.8 Credits**
Created at request of Aerospace Academy.

**POFI 55018 Word One Day-Advanced 0.7 Credits**
Prerequisite(s): Word One Day Intermediate Note: Textbook required; flash drive required In this course, you will use Word to create, manage, revise, and distribute long documents and forms.
POFI 55021  Digital Literacy-IC3  9.6 Credits
Prerequisite(s): None. Note: Textbook is required. Flash drive is required. Learn to use a computer in a business environment. Begin with an introduction to the computer hardware. Learn how to use the Windows operating system. Gain a basic understanding of the most popular business applications – MS Word, MS Excel, MS Access, and MS PowerPoint. Additionally, learn to use the internet and email using MS Outlook. Learn the basics of networks and mobile devices, security and maintenance, cloud computing, apps and applications and Skype and streaming tools.

POFI 55022  ST: Word - One Day - Advanced  0.8 Credits
In this course, you will use Word to create, manage, revise, and distribute long documents and forms.

POFI 55024  Business Computer Applications 6.4 Credits
Note: Textbook required, flash drive required. This course discusses computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business application of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. (BCIS 1305)

POFI 55025  Digital Literacy - II  12.8 Credits
Learn to use a computer in a business environment. Begin with the keyboard; learning typing skills. Then get an introduction to the computer hardware. Learn how to use the Windows operating system. Gain a basic understanding of the most popular business applications - MS Word, MS Excel and PowerPoint. Additionally, learn to use the internet and email. All of these skills prepare you to take the optional IC3 certification exam.

POFI 55026  ST: Word-One Day Intermediate  0.8 Credits
In the first course in this series, Word: One Day, students gained all the basic skills needed to create a wide range of standardized business documents. This continuation provides the next step: to improve proficiency. To do so, one can customize and automate the way Microsoft Word works, and improve the quality of work by enhancing documents with customized Microsoft Word elements. In this course, participants will increase the complexity of their Microsoft Word documents by adding components such as customized lists, tables, charts, and graphics. Participants will also create personalized Microsoft Word efficiency tools.

POFI 55032  ST: Word - One Day  0.8 Credits
POFI 55033  Word Basic Skills - Cenikor  1.6 Credits
Prerequisite(s): None In this course, you will first learn the latest Windows OS. You will learn how to manage multiple windows, how to open and close programs and how to perform file management tasks. Next you will be introduced to Microsoft Word, a powerful application to create and format documents. You will begin with preparing and editing techniques. You will learn how to format, save and print a document. You will be using fonts, keyboard shortcuts, manipulating tabs, cut, copy, and paste text. You will learn page setup - margins, page orientation, inserting page numbers, page breaks, headers, footers, date, time, symbols and other images. You will learn to create tables, populating and formatting them. Must be able to type.

POFI 55034  Introduction to Microsoft Office  4.5 Credits
Prerequisite(s): None. Note: Textbook required. This course discusses computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business application of software, including word processing, spreadsheets, presentation graphics, and business-oriented utilization of the Internet.
BUSINESS OFFICE TECH

(POFM)

POFM 1317 Medical Administrative Support  3 Credits  (3 Lec, 1 Lab)
This course covers instruction in medical office procedures including
appointment scheduling, medical records creation and maintenance,
telephone communications, coding, billing, collecting, and third party
reimbursement.
Course Type: Technical

POFM 1327 Medical Insurance  3 Credits  (3 Lec, 0 Lab)
This survey of medical insurance includes the life cycle of various claim
forms, terminology, litigation, patient relations, and ethical issues.
Course Type: Technical

POFM 41002 Computers in Health Care  4.8-9.6 Credits
POFM 41004 Introduction to Health Records  3.2-9.6 Credits
POFM 41006 Medical Secretary  3.2-4.8 Credits
POFM 41009 Medical Office Procedures  4.8-9.6 Credits
POFM 41013 Medical Terminology I  3.2-9.6 Credits
POFM 41017 Medical Administrative Procedures  4.8-12.8 Credits
POFM 41021 Medical Law and Ethics for Office Practitioners  3.2-4.8 Credits
POFM 41027 Medical Insurance  4.8-12.8 Credits
POFM 41031 Medical Transcription I  6.4-12.8 Credits
POFM 41033 Pharmacology for Office Personnel  3.2-4.8 Credits
POFM 41053 Medical Coding  6.4-12.8 Credits
POFM 41091 Special Topics in Medical Administration  0.7-11.2 Credits
POFM 42013 Medical Transcription II  6.4-12.8 Credits
POFM 42017 Medical Transcription III  6.4-12.8 Credits
POFM 42023 Medical Terminology II  3.2-9.6 Credits
POFM 42033 Medical Document Production  6.4-12.8 Credits
POFM 55000 Billing & Coding Basics  4.8 Credits
Prerequisite(s): Successful completion of Medical Office Professional,
or prior medical office experience/training is required. Call 281-542-2067
for experience waiver form. Note: Textbook required Skilled diagnostic
coding is recognized as one of the top growth occupations. You will
learn enhanced medical terminology and Anatomy and Physiology. You
will also learn the basics of analyzing medical records and assigning
correct diagnostic and procedural codes using ICD-9, CPT, and HCPCS.
You will, additionally, be taught the basics of proper procedural coding of
insurance forms for use in the physician's office, emergency department,
out-patient and inpatient services.
BUSINESS OFFICE TECH (POFT)

POFT ADD  ST in Business Communication  0 Credits

POFT 1301 Business English 3 Credits  (3 Lec, 0 Lab)
This course is an introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business.
Course Type: Technical

POFT 1309 Administrative Office Procedures I 3 Credits  (3 Lec, 0 Lab)
This course focuses on the study of current office procedures, duties, and responsibilities applicable to an office environment.
Course Type: Technical

POFT 1313 Professional Workforce Preparation 3 Credits  (3 Lec, 0 Lab)
This course focuses on preparation for career success including ethics, interpersonal relations, professional attire, and advancement.
Course Type: Technical

POFT 1319 Records and Information Management I 3 Credits  (3 Lec, 0 Lab)
This course covers an introduction to basic records information management systems including manual and electronic filing.
Course Type: Technical

POFT 1325 Business Math Using Technology 3 Credits  (3 Lec, 0 Lab)
This course offers skill development in business math problem-solving using technology.
Course Type: Technical

POFT 1328 Business Presentations 3 Credits  (3 Lec, 1 Lab)
This course offers skill development in planning and conducting business presentations including communication and media skills.
Prerequisite(s): BCIS 1305
Course Type: Technical

POFT 2301 Intermediate Keyboarding 3 Credits  (3 Lec, 1 Lab)
This course offers a continuation of keyboarding skills emphasizing acceptable speed and accuracy levels and formatting documents.
Prerequisite(s): BCIS 1305
Course Type: Technical

POFT 2364 Practicum 3 Credits  (0 Lec, 21 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, the college, and the student. The learning plan relates the workplace training and experiences to the student's general and technical course of study.
Prerequisite(s): 15 credit hours of courses in this program which must include at least one of the following courses: ACNT 1304, POFI 1341, POFT 1325, POFT 1328, or POFT 2301. A program GPA of at least 2.0 is required, or Department approval.
Course Type: Technical

POFT 25010 Word - Core (On-Line) 1.6 Credits
POFT 25011 Word - Expert (On-Line) 1.6 Credits
POFT 41000 Advanced Keyboarding 1.6-4.8 Credits
POFT 41001 Business Communications I 1.6-4.8 Credits
POFT 41003 Receptionist 1.6-4.8 Credits
POFT 41004 Business Writing 0.7-4.8 Credits
POFT 41005 Beginning Office Machines 0.7-3.2 Credits
POFT 41007 Proofreading and Editing 3.2-8 Credits
POFT 41008 Office Productivity Software I 3.2-6.4 Credits
POFT 41009 Administrative Office Procedure 4.8-12.8 Credits
POFT 41010 Beginning Keyboarding 1.6-4.8 Credits
POFT 41011 Intermediate Office Machines 0.7-3.2 Credits
POFT 41012 Intermediate Keyboarding 1.6-4.8 Credits
POFT 41013 Professional Development for O 4.8-9.6 Credits
POFT 41014 Keyboarding 1.6-4.8 Credits
POFT 41015 Office Machines 1.6-4.8 Credits
POFT 41016 Refresher Typing 1.6-4.8 Credits
POFT 41017 Basic Shorthand or Notetaking 1.6-4.8 Credits
POFT 41018 Records Management 0.7-3.2 Credits
POFT 41019 Records and Information Management 4.8-9.6 Credits
POFT 41020 Business English 0.7-3.2 Credits
POFT 41021 Business Math 4.8-9.6 Credits
POFT 41022 Introduction to General Office 1.6-4.8 Credits
POFT 41023 Fundamentals of Filing 0.7-3.2 Credits
POFT 41024 Introduction to Word Processing 3.2-6.4 Credits
POFT 41025 Business Math and Machine Application 4.8-9.6 Credits
POFT 41027 Introduction to Keyboarding 4.8-8 Credits
POFT 41028 Business & Professional Presentation 4.8-9.6 Credits
POFT 41029 Keyboarding and Document Forma 4.8-9.6 Credits
POFT 41031 Business Machine Applications 3.2-9.6 Credits
POFT 41042 Intermediate Word Processing A 0.7-3.2 Credits
POFT 41043 Intermediate Shorthand or Note 1.6-4.8 Credits
POFT 41044 Office Productivity Software I 1.6-3.2 Credits
POFT 41045 Shorthand/Notetaking I 4.8-9.6 Credits
POFT 41049 Administrative Office Procedure 4.8-12.8 Credits
POFT 41059 Records and Information Management 4.8-12.8 Credits
POFT 41091 Special Topics in Business Com 0.7-11.2 Credits
POFT 41092 Special Topics in Administration 0.7-11.2 Credits
POFT 41093 Special Topics General Office/ 0.7-11.2 Credits
POFT 41096 Special Topics in Receptionist 0.7-11.2 Credits
POFT 42001 Document Formatting and Skillb 6.4-12.8 Credits
POFT 42003 Speed and Accuracy Building 4.8-8 Credits
POFT 42012 Business Communications II 4.8-9.6 Credits
POFT 42021 Machine Transcription 6.4-12.8 Credits
POFT 42031 Administrative Systems 4.8-12.8 Credits
POFT 42033 Advanced Document Formatting & 8-12.8 Credits
POFT 55002 Administrative Office Procedures I 4.8 Credits
Advance your office application skills by taking this course. Emphasis will be given to decision making, and critical thinking in the workplace. Study current office procedures, including telephone skills, time management, travel and meeting arrangements, mail processing, and other duties and responsibilities in an office environment. (POFT 1309)

POFT 55003 Business Communications 4.8 Credits
Note: Textbook required Study the practical principles of word usage, language structure, and writing mechanics. Detailed attention is given to report writing and to the construction of letters concerned with sales, credits, collections, inquiries, adjustments, orders, recommendations and applications for employment. (BUSI 2304)

POFT 55004 Keyboarding on the PC 1.6 Credits
Prerequisite(s): None Note: No textbook required. The primary input device to a computer is the keyboard. Therefore proficiency and accuracy in keyboarding is your first foundational course to all other computer classes. This course provides an introduction to fundamental keyboarding techniques such as finger position and movement, increasing speed and reducing errors. Without this course, or a typing speed of at least 20 wpm, you will not be prepared for any other computer class.

POFT 55005 ST: Job Search & Employment Skills 2.4 Credits
Study of the skills required to obtain and maintain a job. Topics include standard applications for employment, interview procedures, working with placement agencies, personal appearance and attitudes, employer expectations, and employer/employee relations.

POFT 55007 ST: Job Readiness Complete 8.8 Credits

POFT 55008 ST: Job Readiness 4.8 Credits
Polish off those marketable job skills! Now that you've learned the technical skills, take them to the office along with your soft skills. Learn about common office procedures, business writing, job interviewing, customer service, business etiquette, and much more.

POFT 55009 Records & Information Management I 4.8 Credits
Development of a systematic approach to the management of business records for decision making and problem solving. Topics include creation, protection, retrieval, preservation, and control of various types of business records and automated systems. (POFT 1319)

POFT 55010 Train the Trainer ISO/TS 4 Credits
Become a certified Plexus Trainer/Coach and deliver many of Plexus' foundation courses including the Plexus Transitioning Internal Auditors to ISO/TS 16949:2002 training course that meets Ford's customer specific requirements! With Plexus Trainer/Coach Certification Training, individuals will develop high-quality internal resources to attack any compliance or improvement challenge by providing individuals with the tools, techniques, skills and confidence to be a training leader. This course also provides your organization with more people with the insights to identify and solve problems as they arise. The result is a more nimble and responsive organization that can mobilize quickly to respond to changing customer demands and industry requirements.

POFT 55011 Introduction to Keyboarding 3.2 Credits
Students will develop skills in keyboarding with an emphasis on alphabet, number, and symbol keys by touch. Skills can be applied to computers, typewriters, and other equipment with keyboards. (POFT 1127)

POFT 55012 Keyboarding and Document Formatting 6.4 Credits
Students will learn proper keyboarding techniques in addition to the application of proofreading and editing skills to create basic business documents. (POFT 1329)

POFT 55013 Business Grammar for the Workplace 0.8 Credits
This course provides business grammar and writing skills training and techniques. The content includes techniques to enhance business grammar usage in written documents in order to get the desired results from readers.

POFT 55014 Business Math Using Technology 4.8 Credits
Develop your skills using electronic calculators and business mathematical functions, including problem solving skills using spreadsheets and calculators. (POFT 1325)

POFT 55015 Document Formatting/SkillBldg 4.8 Credits
This course emphasizes proofreading, editing, following instructions, and keying documents from various types of copy. (POFT 2301)

POFT 55016 Clerk and Checker Advanced 0.8 Credits
Course covers advanced clerk and checker positions in a maritime setting including homeland security and technology enhancement.

POFT 55017 ST: Workplace Skills 3 Credits

POFT 55018 ST: Job Readiness Training 1.6 Credits
Students learn how to complete employment applications, interview procedures, importance of personal appearance and behaviors; and employer expectations.

POFT 55019 CPS Review Comprehensive 12 Credits
This course is review preparation for Parts I-III of the CPS exam. Topics include advanced concepts in Office Systems and Technology, Office Administration and Management.

POFT 55020 CAP Review Comprehensive 6 Credits
This course is review preparation for Part IV of the CAP exam.

POFT 55024 External Learning Experience 17.6 Credits
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

POFT 55025 Occupational Internship A 11.2 Credits
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

POFT 55026 Occupational Internship B 8 Credits
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

POFT 55027 Occupational Internship C 4 Credits
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.

POFT 55028 Effective Writing 0.8 Credits
Whether you are writing a memo to your boss or an email to a co-worker, you need to use different writing techniques to make your ideas and words work together seamlessly. Learn how to empower your writing and become skilled at using strategies for writing persuasively. Learn techniques to examine your own thoughts and develop skills for expressing them effectively.

POFT 55029 Business Writing Techniques 0.7 Credits
Whether you are writing a memo to your boss or an email to a co-worker, you need to use different writing techniques to make your ideas and words work together seamlessly. Learn how to empower your writing and become skilled at using strategies for writing persuasively. Learn techniques to examine your own thoughts and develop skills for expressing them effectively.
POFT 55030 Writing Professional E-mails 0.7 Credits
This course examines the potential for disaster with e-mails and teaches the skills to write message that clear and concise while avoiding the mistakes that lead to misunderstanding

POFT 55032 Intro to Keyboarding 0.7 Credits
Become familiar with the different types of keys on the keyboard. Become familiar with the finger position of the alphanumeric keys on the keyboard.

POFT 55033 ST: Job Search Skills 0.8 Credits
Learn skills required to obtain a job.

POFT 55034 Professional Workforce 4.8-9.6 Credits

POFT 55035 Get a Glimpse Learning Experience - Intro I 0.7-11.2 Credits
Introduction work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55036 Get a Glimpse Learning Experience-Intro II 0.7-11.2 Credits
Introduction II work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55037 Get a Glimpse Learning Experience - Intermediate II 0.7-11.2 Credits
Intermediate work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55038 Get a Glimpse Learning Experience - Advance I 0.7-11.2 Credits
Advanced I work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55039 Get a Glimpse Learning Experience-Advance II 0.7-11.2 Credits
Advanced II work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55040 CPS Review - Parts I, II, and III 2.1 Credits
This course is designed to provide a review of the skills required to successfully complete the CPS Examination as provided by the International Association for Administrative Professionals (IAAP). Those seeking the CAP certification are advised to enroll in the CPS/CAP Review course.

POFT 55041 CPS/CAP Review-Parts I, II, III, IV 2.8 Credits
This course is designed to provide a review of the skills required to successfully complete the CAP Examination as provided by the International Association for Administrative Professionals (IAAP).

POFT 55042 ST: Career Readiness 1.2 Credits
Professional development training such as workplace behavior, writing resumes, and performing job searches.

POFT 55043 Get a Glimpso Learning Experience: Leadership 0.7-11.2 Credits
Leadership work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55044 Get a Glimpse Learning Experience: Team Building 0.7-11.2 Credits
Team Building work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55045 Get a Glimpse Learning Experience: Communication 0.7-11.2 Credits
Communication work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55046 Get a Glimpse Learning Experience: Performance 0.7-11.2 Credits
Performance work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55047 Effective Business Writing Techniques 1.6 Credits
Whether you are writing a memo to your boss or an email to a co-worker, you need to use different writing techniques to make your ideas and words work together seamlessly. Learn how to empower your writing and become skilled at using strategies for writing persuasively. Learn techniques to examine your own thoughts and develop skills for expressing them effectively.

POFT 55048 CPS Exam Review 2.4 Credits
The rewards of achieving the Certified Professional Secretary (CPS) certifications include pride in accomplishment, increased self-esteem, greater respect from employers and peers, and confidence to assume greater responsibilities as well as possible pay increases, bonuses, and opportunities for advancement. This course provides information to prepare for part three of the examination, Management.

POFT 55049 Student Success 3 Credits

POFT 55050 CAP Exam Review 2.8 Credits
This course is designed to provide a review of the skills required to successfully complete the CAP Examination as provided by the International Association for Administrative Professionals (IAAP).

POFT 55051 Pathways - Communication 0.7-11.2 Credits
Communication work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55052 Pathways - Leadership 0.7-11.2 Credits
Leadership work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.

POFT 55053 Pathways - Team Building 0.7-11.2 Credits
Team Building work based learning experience that enables the student to apply specialized occupational theory, skills and concepts pertinent to the occupation and relevant to the professional development of the student.
POFT 55054  ST: Student Success Skills  1.6 Credits
Prerequisite(s): None. The class will provide participants with several of
the professional tools they will need in order to be successful in a school
environment, as well as preparing for, searching for, and landing and
keeping a job.

POFT 55055  SharePoint MOS Certification Instructor Training  4.8
Credits
Prerequisite(s): Microsoft Office Skills Note: Textbook and flash drive
are required. This certification course will teach the tasks required to
create SharePoint content that you need to store on a SharePoint site by
designing SharePoint repositories such as document libraries and lists,
as well as structuring navigation of the site so that users can access the
content. You will learn to managing pages and the Web Parts on a page
and analyze site activity. The course will also focus on the features and
benefits of SharePoint 2010 My Site, configuring and consuming site
search results, and the integration of Microsoft Sharepoint 2010 Services
and Microsoft Office 2010 applications. All of these skills are required to
pass the Sharepoint 2010 certification exam.

POFT 55056  SharePoint MOS Certification  4.8 Credits
Prerequisite(s): Microsoft Office Skills Note: Textbook and flash drive
are required. This certification course will teach the tasks required to
create SharePoint content that you need to store on a SharePoint site by
designing SharePoint repositories such as document libraries and lists,
as well as structuring navigation of the site so that users can access the
content. You will learn to managing pages and the Web Parts on a page
and analyze site activity. The course will also focus on the features and
benefits of SharePoint 2010 My Site, configuring and consuming site
search results, and the integration of Microsoft Sharepoint 2010 Services
and Microsoft Office 2010 applications. All of these skills are required to
pass the Sharepoint 2010 certification exam.

POFT 55057  Train the Trainer 1  1.4 Credits
For the non-professional trainer who must develop and conduct training
sessions on occasion. Due to job changes, re-training is needed at an
increasing rate, more managers and team leaders are being asked to do
training that was formerly done by experienced trainers as well as provide
orientation to subordinates.

POFT 55058  Train the Trainer  4 Credits
Note: It shall be the policy of this school that all students provide
appropriate photo identification upon enrollment. This course will satisfy
the Trainer the Trainer and Assessor training requirements of 46 CFR
10.402(b)(2)(iii)(A), 10.405(a)(1) and 46 CFR 10.407(c)(5)(i). We approve
completion of this course as satisfying the requirement for instructors
and assessors as stated in Section A-I/6, paragraph 7, of the STCW Code,
as amended 2010 and the guidance regarding Qualified Instructors as
stated in NVIC 03-14, and Qualified Assessors as stated in NVIC 19-14.

POFT 55059  Business English  4.8 Credits
This course is an introduction to a practical application of basic language
usage skills with emphasis on fundamentals of writing and editing for
business. (POFT 1301)

POFT 55060  Energy CareerLink for PTAC Students  2 Credits
To complement the technical skills students acquire as they pursue PTAC
degrees, the students will participate in Energy CareerLink, CPD’s career
readiness series which focuses on developing interpersonal skills. Topics
include work ethic, personal accountability, communications skills, team
work and how to develop leadership skills

POFT 55061  Energy CareerLink Life Skills  1.6 Credits
The students will participate in a CPD career readiness series which
focuses on developing interpersonal skills. Topics include: work ethic,
personal accountability, communications skills, team work and how to
develop leadership skills.

POFT 55062  Ready or Not 1.5  1.2 Credits
This course covers the skills required to obtain a job such as interviews,
resume, and job search.

POFT 59004  Word Perfect (Net)  2.4 Credits
POFT 59006  Word - Introduccion Online  2.4 Credits
BUSINESS TECHNOLOGY
(BCIS)

BCIS 1305  Business Computer Applications  3 Credits  (2 Lec, 2 Lab)
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Student will only receive 3 semester credit hours for either BCIS 1305 or ITSC 1309.
Course Type: Academic
CHEMISTRY (CHEM)

CHEM 1105 Introductory Chemistry I (lab) 1 Credit  (0 Lec, 3 Lab)
This survey course is introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and non-allied health students.
Prerequisite(s): Reading level 7, Writing level 6, and Math level 6;
Co-requisite(s): CHEM 1305

Course Type: Academic

CHEM 1111 General Chemistry I (lab) 1 Credit  (0 Lec, 3 Lab)
This lab course covers basic laboratory experiments supporting theoretical principles presented in CHEM 1311; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.
Prerequisite(s): Reading level 7, Math level 9 and Math 1314 or higher;
Co-requisite(s): CHEM 1311

Course Type: Academic

CHEM 1112 General Chemistry II (lab) 1 Credit  (0 Lec, 3 Lab)
This second semester of the general inorganic chemistry lab covers basic laboratory experiments supporting theoretical principles presented in CHEM 1312; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.
Prerequisite(s): CHEM 1311/1111, Reading level 7 and Math level 9;
Co-requisite(s): CHEM 1312

Course Type: Academic

CHEM 1305 Introductory Chemistry I (lecture) 3 Credits  (3 Lec, 0 Lab)
This lecture survey course is introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for non-science and non-allied health students.
Prerequisite(s): Reading level 7, Writing level 6, and Math level 6;
Co-requisite(s): CHEM 1105

Course Type: Academic

CHEM 1311 General Chemistry I (lecture) 3 Credits  (3 Lec, 0 Lab)
This lecture course covers the fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.
Prerequisite(s): Reading level 7, Math level 9 and Math 1314 or higher;
Co-requisite(s): CHEM 1111

Course Type: Academic

CHEM 1312 General Chemistry II (lecture) 3 Credits  (3 Lec, 0 Lab)
This second semester of the general inorganic chemistry lecture covers chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.
Prerequisite(s): CHEM 1311/1111, Reading level 7 and Math level 9;
Co-requisite(s): CHEM 1112

Course Type: Academic

CHEM 2123 Organic Chemistry I (lecture) 3 Credits  (3 Lec, 0 Lab)
This laboratory course accompanies CHEM 2323, Organic Chemistry I. Laboratory activities will reinforce fundamental principles of organic chemistry, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Methods for the purification and identification of organic compounds will be examined.
Prerequisite(s): CHEM 1312/1112;
Co-requisite(s): 2323

Course Type: Academic

CHEM 2125 Organic Chemistry II (lecture) 3 Credits  (3 Lec, 0 Lab)
This laboratory course accompanies CHEM 2325, Organic Chemistry II. Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules.
Prerequisite(s): CHEM 2323/2123;
Co-requisite(s): CHEM 2325

Course Type: Academic

CHEM 2323 Organic Chemistry I (lecture) 3 Credits  (3 Lec, 0 Lab)
In this introductory organic chemistry lecture course fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. THIS COURSE IS INTENDED FOR STUDENTS IN SCIENCE OR PRE-PROFESSIONAL PROGRAMS.
Prerequisite(s): CHEM 1312/1112;
Co-requisite(s): CHEM 2123

Course Type: Academic
CHEM 2325  Organic Chemistry II (lecture)  3 Credits  (3 Lec, 0 Lab)
This second semester of introductory organic chemistry lecture course advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules.
THIS COURSE IS INTENDED FOR STUDENTS IN SCIENCE OR PRE-PROFESSIONAL PROGRAMS.
Prerequisite(s): CHEM 2323/2123;
Co-requisite(s): CHEM 2125

Course Type: Academic

CHEM 2389  Academic Cooperative  3 Credits  (1 Lec, 8 Lab)
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.
Prerequisite(s): Eight hours of chemistry; Reading level 7, Writing level 7, Math level 8

Course Type: Academic

CHEM 49003  HEP Chemistry Lab  4.8 Credits
CHILD DEVELOPMENT (CDEC)

CDEC 1319 Child Guidance 3 Credits (3 Lec, 1 Lab)
This is an exploration of guidance strategies for promoting prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences.
Course Type: Technical

CDEC 1321 The Infant and Toddler 3 Credits (3 Lec, 0 Lab)
This course is a study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, appropriate environments, materials and activities, and teaching/guidance techniques.
Course Type: Technical

CDEC 1323 Observation and Assessment 3 Credits (3 Lec, 1 Lab)
This course is a study of observation skills, assessment techniques, and documentation of children's development.
Course Type: Technical

CDEC 1356 Emergent Literacy for Early Childhood 3 Credits (3 Lec, 0 Lab)
This course explores the principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum.
Course Type: Technical

CDEC 1359 Children With Special Needs 3 Credits (3 Lec, 0 Lab)
This course is a survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role and legislative issues.
Course Type: Technical

CDEC 1413 Curriculum Resources for Early Childhood Programs 4 Credits (3 Lec, 3 Lab)
This course is a study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight.
Course Type: Technical

CDEC 1417 Child Development Associate Training I 4 Credits (3 Lec, 4 Lab)
This course is based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development overview. The four functional areas of study are creative, cognitive, physical, and communication.
Course Type: Technical

CDEC 1458 Creative Arts for Early Childhood 4 Credits (3 Lec, 3 Lab)
This course is an exploration of principles, methods, and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight.
Course Type: Technical

CDEC 2326 Administration of Programs for Children I 3 Credits (3 Lec, 0 Lab)
This course includes the application of management procedures for early care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication.
Course Type: Technical

CDEC 2328 Administration of Programs for Children II 3 Credits (3 Lec, 0 Lab)
This course includes an in-depth study of the skills and techniques in managing early care and education programs, including legal, ethical issues, personnel management, team building, leadership, conflict resolution, stress management advocacy, professionalism, fiscal analysis, planning parent education/partnerships, and technical applications in programs.
Course Type: Technical

CDEC 2341 The School Age Child 3 Credits (3 Lec, 0 Lab)
This is a study of programs for the school age child, including an overview of development, learning environments, materials, activities, and guidance techniques.
Course Type: Technical

CDEC 2366 Practicum (or Field Experience) - Child Care Provider/Assistant 3 Credits (0 Lec, 21 Lab)
This course includes practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Prerequisite or Co-requisite(s): CDEC 1319
Course Type: Technical

CDEC 2407 Math and Science for Early Childhood 4 Credits (3 Lec, 3 Lab)
This course is an exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play.
Course Type: Technical

CDEC 2422 Child Development Associate Training II 4 Credits (3 Lec, 4 Lab)
This course is a continuation of the study of the requirements for the Child Development Associate (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance.
Course Type: Technical

CDEC 2424 Child Development Associate Training III 4 Credits (3 Lec, 4 Lab)
This course is a continuation of the requirements for the Child Development Associate (CDA). The three functional areas of study include family, program management and professionalism.
Course Type: Technical

CDEC 25020 HelpChildGainSelfContrl-Wrkshp 0.7 Credits
(CDEC 1008) Exploration of developmentally appropriate programs and learning activities. This workshop will provide the teacher/caregiver with positive guidance techniques that will help young children gain self control. There will be a special emphasis on classroom environment and classroom management. (No textbook is required.)
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CDEC 25022 Ages/Stages-Inf/Toddler-Wrkshp 0.7 Credits
CDEC 35007 ST in Child Development 0.07 Credits
CDEC 35008 Classroom Management-Behavior 0.07 Credits
CDEC 41000 Laboratory Experience: Child G 1.6-4.8 Credits
CDEC 41002 Laboratory Experience: Nutriti 1.6-4.8 Credits
CDEC 41003 Family and the Community 4.8-11.2 Credits
CDEC 41004 Child Abuse: Identification/T 0.7-3.2 Credits
CDEC 41005 Basic Child Care and Developme 0.7-9.6 Credits
CDEC 41006 Child Care Learning Theory for 0.7-3.2 Credits
CDEC 41007 Child Care Methods for Child C 0.7-3.2 Credits
CDEC 41008 Curriculum/Activities for Youn 0.7-3.2 Credits
CDEC 41009 Basic Child Care Worker 0.8-1.6 Credits
CDEC 41010 Child Care Management: Family 0.7-3.2 Credits
CDEC 41011 Introduction to Early Childhoo 4.8-8 Credits
CDEC 41012 Child Guidance and Discipline 0.7-3.2 Credits
CDEC 41013 Curriculum Resources for Early 4.8-11.2 Credits
CDEC 41015 Child Guidance and Discipline 0.7-3.2 Credits
CDEC 41016 Child Development Associate 11.2-16 Credits
CDEC 41017 Child Development Associate 4.8-14.4 Credits
CDEC 41018 Nutrition, Health, and Safety 4.8-8 Credits
CDEC 41019 Child Guidance 4.8-11.2 Credits
CDEC 41021 The Infant and Toddler 4.8-14.4 Credits
CDEC 41026 Administration of Programs for 4.8-11.2 Credits
CDEC 41027 Family Child Care 4.8-16 Credits
CDEC 41029 Laboratory Experience: Family 1.6-4.8 Credits
CDEC 41032 Issues for Early Care and Educ 0.7-4.8 Credits
CDEC 41036 Respite Care for the Exception 1.6-4.8 Credits
CDEC 41038 Laboratory Experience: Early C 1.6-4.8 Credits
CDEC 41039 Issues Related to Child Care L 0.7-11.2 Credits
CDEC 41041 CDA Preparation for Assessment 1.6-4.8 Credits
CDEC 41043 Independent Study in Child Dev 4.8-9.6 Credits
CDEC 41051 Child Development for Child Ca 0.7-4.8 Credits
CDEC 41054 Child Growth and Development 4.8-12.8 Credits
CDEC 41056 Emergent Literacy for Early Ch 4.8-9.6 Credits
CDEC 41057 Math and Science for Early Chi 4.8-9.6 Credits
CDEC 41058 Creative Arts for Early Childh 4.8-9.6 Credits
CDEC 41059 Children with Special Needs 4.8-11.2 Credits
CDEC 41091 Special Topics in Family Life 0.7-11.2 Credits
CDEC 41092 Special Topics in Child Develo 0.7-11.2 Credits
CDEC 41093 Special Topics in Family Livin 0.7-11.2 Credits
CDEC 41094 Special Topics in Early Childh 0.7-11.2 Credits
CDEC 41095 Special Topics in Child Care P 0.7-11.2 Credits
CDEC 41096 Special Topics in Administrati 0.7-11.2 Credits
CDEC 42004 Child Abuse and Neglect 0.7-8 Credits
CDEC 42022 Child Development Associate Tr 4.8-14.4 Credits
CDEC 42024 Child Development Associate Tr 4.8-14.4 Credits

CDEC 55006 ParaEducator Institute Training ISD 1.8 Credits
Prerequisite(s): High School Diploma or GED from Texas accredited institution Note: Materials provided The first two days of each institute will consist of training in four modules. On day three, participants will take a formal local academic assessment. This class is geared toward the districts within our service region. Upon successful mastery of the content, participants will receive certification.

CDEC 55007 Life Skills 3.5 Credits
Family child care philosophy, program planning, supervision of personnel, budgeting, record keeping, meal management, and health and safety practices.

CDEC 55008 Child Development Associate Training I 11.2 Credits
Note: Textbook is required. This course is based on the requirements of the Child Development Association credential (CDA). Topics include CDA overview, observation skill and child growth and development overview. The four functional areas of study are creative, cognitive, physical and communication. It provides educational training for persons interested in teaching young children and/or directing child care centers. (CDEC 1417)

CDEC 55009 Child Development Associate Training II 11.2 Credits
Prerequisite(s): Child Development Associate Training I Note: Textbook is required. This course is a continuation of the study of the requirements for the Child Development Association (CDA). The six functional areas of study include, safe, healthy, learning environment, self and social guidance. It provides educational training for persons interested in teaching young children and/or directing child care centers. (CDEC 2422)

CDEC 55010 Child Development Associate Training III 11.2 Credits
Prerequisite(s): Child Development Associate Training II Note: Offered online only; Internet access required; textbook is required. This course is a continuation of the requirements for the Child Development Association (CDA). The three functional areas of study include family, program management and professionalism. It provides educational training for persons interested in teaching young children and/or directing child care centers. (CDEC 2424)

CDEC 55011 Child Development Associate Training II - Spanish Version 4.8 Credits
Provides educational training for persons interested in teaching young children and/or directing child care centers. Prerequisite(s): None. Note: Textbook required. This course is conducted in Spanish.

CDEC 55012 Emergent Literacy for Early Childhood 4.8 Credits
This course explores the principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum. (CDEC 1356)

CDEC 55013 Administration of Programs for Children I 4.8 Credits
Note: Textbook required This course includes the application of management procedures for early child care and education programs. Includes planning, operating, supervising, and evaluating programs. Topics cover philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication.

CDEC 55014 Child Guidance 6.4 Credits
This is an exploration of guidance strategies for promoting prosocial behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. (CDEC 1319)
CDEC 55015  Curriculum Resources for Early Childhood Programs  9.6 Credits
This course is a study of the fundamentals of developmentally appropriate curriculum design and implementation in early care and education programs for children birth through age eight. (CDEC 1413)

CDEC 55016  Observation and Assessment  6.4 Credits
This course is a study of observation skills, assessment techniques, and documentation of children's development. (CDEC 1323)

CDEC 55017  Infant and Toddler  4.8 Credits
This course is a study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, appropriate environments, materials and activities, and teaching/guidance techniques. (CDEC 1321)

CDEC 55018  Children with Special Needs  4.8 Credits
This course is a survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, and the advocacy role and legislative issues. (CDEC 1359)

CDEC 55019  Administration of Programs for Children II  4.8 Credits
This course includes an in-depth study of the skills and techniques in managing early care and education programs, including legal, ethical issues, personnel management, team building, leadership, conflict resolution, stress management advocacy, professionalism, fiscal analysis, planning parent education/partnerships, and technical applications in programs. (CDEC 2328)

CDEC 55020  Math and Science for Early Childhood  6.4 Credits
This course is an exploration of principles, methods, and materials for teaching children math and science concepts and process skills through discovery and play. (CDEC 2407)

CDEC 55021  Creative Arts for Early Childhood  9.6 Credits
This course is an exploration of principles, methods and materials for teaching music, movement, visual arts and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight. (CDEC 1458)

CDEC 55022  Paraprofessional Educational Aide Training  6.4 Credits
Prerequisite(s): High school diploma or TxCHE from an accredited institution or evaluation of foreign credentials from an accepted evaluation agency showing high school equivalency or higher. Or, be an AEL grant participant and/or ATB qualified working towards a TxCHE. This course is designed to offer participants the study materials they need to successfully and efficiently prepare for their Para Educator exam as well as focus on observing behaviors in the classroom context and how the teachers deliver teaching.
CHILD DEVELOPMENT (TECA)

TECA 1303  Families, School and Community  3 Credits  (3 Lec, 1 Lab)
This is a study of the child, family, community, and schools. It includes parent education and involvement, family and community lifestyles, child abuse, and current family life issues. The course content is aligned with state Board for Educator Certification Pedagogy and Professional Responsibilities standards. The course requires students to participate in a minimum of 16 hours field experience with children from infancy through age 12 in a variety of settings with varied and diverse populations. Credit will not be given for both TECA 1303 and CDEC 1303.
Course Type: Academic

TECA 1311  Educating Young Children  3 Credits  (3 Lec, 1 Lab)
This is an introduction to the education of the young child, including developmentally appropriate practices and programs, theoretical and historical perspectives, ethical and professional responsibilities, and current issues. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the national Assessment of Educational Progress position statement related to developmentally appropriate practices for children from birth through age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations; and the course includes a minimum of 16 hours of field experiences.
Course Type: Academic

TECA 1318  Wellness of the Young Child  3 Credits  (3 Lec, 1 Lab)
This is a study of the factors that impact the well-being of the young child including healthy behavior, food, nutrition, fitness, and safety practices. Focuses on local and national standards and legal implications of relevant policies and regulations. Course content must be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards and coincide with the National Assessment of Educational Progress position statement related to developmentally appropriate practices for children from birth to age eight. Requires students to participate in field experiences with children from infancy through age 12 in a variety of settings with varied and diverse populations. Course includes a minimum of 16 hours of field experiences.
Course Type: Academic

TECA 1354  Child Growth and Development  3 Credits  (3 Lec, 0 Lab)
This course is a study of the physical, emotional, social, and cognitive factors impacting growth and development of children through adolescence. Credit will not be given for both TECA 1354 and CDEC 1354.
Course Type: Academic
CHINESE (CHIN)

CHIN 1411  Beginning Chinese I  4 Credits  (3 Lec, 2 Lab)
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): Reading level 6
Course Type: Academic

CHIN 1412  Beginning Chinese II  4 Credits  (3 Lec, 2 Lab)
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): CHIN 1411
Course Type: Academic

CHIN 2311  Intermediate Chinese I  3 Credits  (3 Lec, 0 Lab)
This course covers a review and application skills in listening comprehension, speaking, reading and writing. It emphasizes conversation, vocabulary acquisition, reading, composition, and culture. This course is designed to give the student who has completed CHIN 1411 and CHIN 1412 increased fluency and confidence in the use of the Chinese language. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): CHIN 1412
Course Type: Academic

CHIN 2312  Intermediate Chinese II  3 Credits  (3 Lec, 0 Lab)
This course is a review and application of skills in listening comprehension, speaking, reading and writing, emphasizing conversation, vocabulary acquisition, reading, composition, and culture. This course is a continuation of CHIN 2311. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): CHIN 2311
Course Type: Academic
COLLEGE PREPARATORY
(GUST)

GUST 0105 College Student Success (NCBO) 1 Credit (1 Lec, 0 Lab)
This course covers psychology of learning and success, and examines factors that underlie learning, success, and personal development in higher education. This course also emphasizes student responsibility and techniques in behavior modification. Topics covered include information processing, memory, strategic learning, self-assessment and regulation, self-management, goal setting and commitment, motivation, educational and career planning, decision making, networking, emotional intelligence, and learning styles. Techniques of study such as time management, listening and note taking, text marking, library and research skills, preparing for examinations, and utilizing learning resources are covered. It includes courses in college orientation and developments of students’ academic skills that apply to all disciplines.
Prerequisite(s): Reading level 2, Writing level 4, and Math level 4
Course Type: College Prep

GUST 0305 College Student Success 3 Credits (3 Lec, 0 Lab)
This course covers psychology of learning and success, and examines factors that underlie learning, success, and personal development in higher education. This course also emphasizes student responsibility and techniques in behavior modification. Topics covered include information processing, memory, strategic learning, self-assessment and regulation, self-management, goal setting and commitment, motivation, educational and career planning, decision making, networking, emotional intelligence, and learning styles. Techniques of study such as time management, listening and note taking, text marking, library and research skills, preparing for examinations, and utilizing learning resources are covered. It includes courses in college orientation and developments of students’ academic skills that apply to all disciplines.
Prerequisite(s): Reading level 2, Writing level 4, and Math level 4
Course Type: College Prep
COLLEGE PREPARATORY
(INRW)

INRW 0101 Integrated Reading and Writing (NCBO) 1 Credit (1 Lec, 0 Lab)
This NCBO is a refresher for grammatical forms, proper punctuation, sentence and paragraph structure, sequential process of reading with emphasis on reading comprehension, vocabulary building, and literal and inferential meanings.
Prerequisite(s): Reading level 4

Course Type: College Prep

INRW 0112 NCBO for Advanced Reading and Writing 1 Credit (1 Lec, 0 Lab)
This course comprises the integration of critical reading and academic writing skills. Successful completion of this intervention if taught at the upper (exit) level fulfills TSI requirements for reading and/or writing. Note: For institutions offering one or more levels, this NCBO shall be used for upper (exit) level and may be used for lower level(s).
Prerequisite(s): Reading Level 6, Writing Level 6.
Co-requisite(s): ENGL 1301

Course Type: College Prep

INRW 0301 Developmental Integrated Reading and Writing - Intermediate 3 Credits (3 Lec, 1 Lab)
This first-level course is a combined lecture/lab, performance-based course designed to develop students’ critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. This is a course with a required lab. The course fulfills TSI requirements for reading and/or writing.
Prerequisite(s): Reading level 4, Writing level 4

Course Type: College Prep

INRW 0302 Developmental Integrated Reading and Writing - Advanced 3 Credits (3 Lec, 1 Lab)
This second-level course is a combined lecture/lab, performance-based course designed to develop students’ critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. This is a course with a required lab. The course fulfills TSI requirements for reading and/or writing.
Prerequisite(s): Reading level 6, Writing level 6

Course Type: College Prep
COMMERCIAL PHOTOGRAPHY (PHTC)

PHTC 1311 Fundamentals of Photography 3 Credits (2 Lec, 4 Lab)
This course is an introduction to camera operation and image production, composition, correct exposure and proper lighting. Emphasis is on digital photography.
Course Type: Technical

PHTC 41002 Darkroom Techniques 4.8-16 Credits
PHTC 41003 Studio Lighting 1.6-4.8 Credits
PHTC 41004 Introductory Professional Photography 1.6-4.8 Credits
PHTC 41006 Fashion Photography 4.8-14.4 Credits
PHTC 41011 Fundamentals of Photography 4.8-16 Credits
PHTC 41013 History of Photography 4.8-14.4 Credits
PHTC 41021 Photographic Retouching 4.8-14.4 Credits
PHTC 41025 Photographic Science I 4.8-14.4 Credits
PHTC 41028 Photographic Studio Management 4.8-16 Credits
PHTC 41031 Photographic Retouching 4.8-14.4 Credits
PHTC 41035 Basic Camera Techniques 4.8-14.4 Credits
PHTC 41041 Color Photography I 4.8-16 Credits
PHTC 41043 Expressive Photography 4.8-16 Credits
PHTC 41045 Illustrative Photography I 4.8-16 Credits
PHTC 41047 Landscape Photography 4.8-16 Credits
PHTC 41049 Photo Digital Imaging I 4.8-16 Credits
PHTC 41051 Photojournalism I 4.8-16 Credits
PHTC 41053 Portraiture I 4.8-16 Credits
PHTC 41091 Special Topics in Commercial Photography 0.7-11.2 Credits
PHTC 42001 Intermediate Photography 4.8-16 Credits
PHTC 42004 Intermediate Professional Photography 1.6-4.8 Credits
PHTC 42007 Law Enforcement Photography 1.6-4.8 Credits
PHTC 42031 Architectural Photography 4.8-16 Credits
PHTC 42032 Industrial Photography 1.6-4.8 Credits
PHTC 42033 Photographic Science II 6.4-16 Credits
PHTC 42035 Basic Camera Techniques 4.8-14.4 Credits
PHTC 42036 Illustrative Photography 1.6-4.8 Credits
PHTC 42037 Advanced Professional Photography 1.6-4.8 Credits
PHTC 42041 Color Photography II 4.8-16 Credits
PHTC 42045 Illustrative Photography II 4.8-16 Credits
PHTC 42049 Photo Digital Imaging II 4.8-16 Credits
PHTC 42051 Photojournalism II 4.8-16 Credits
PHTC 42053 Portraiture II 4.8-16 Credits
PHTC 55000 Advanced Adobe Photoshop 3.3 Credits
PHTC 55001 Introductory Professional Photography 2.4 Credits
Get instruction in camera functions, types of lenses, choosing film and filters, flash photography. This course will introduce you to film exposure and print finishing. This course covers the basics of a digital camera and/or 35mm camera, including f-stops, shutter speed, ASA ratings, and picture-taking techniques. Criteria for buying a camera will be discussed with the instructor on the first day of class.

PHTC 55002 Intermediate Professional Photography 2.4 Credits
Prerequisite(s): Introductory Professional Photography. Note: Criteria for buying a camera will be discussed with the instructor on the first day of class. Continue learning Professional Photography with emphasis on social, portrait, studio, fashion, theatrical, publicity, and convention photography as well as landscapes and still life. Creative use of flash and camera functions will also be covered.
PHTC 55003  Beginning Photography  9.6 Credits  
A beginning course in the taking, developing and printing of photographs. Students receive instruction in photographic principles and are given assignments to complete in the laboratory period or outside class. Darkroom facilities and a limited number of cameras are furnished by the college. (COMM 1318) (ARTS 2356)

PHTC 55004  Portrait Photography  3.2 Credits  
Prerequisite(s): Introductory Professional Photography and completion or concurrent enrollment in Intermediate Professional Photography. Study the photographic principles applied to portrait lighting, posing, printing, and subject rapport. You will learn to use a variety of basic lighting patterns; relate the principles of subject rapport and aesthetic posing methods; produce effective finished portraits; and analyze the subject. The photography will be done in color and/or black and white. The students will produce a portfolio of their work from at least five different portrait sessions that will be critiqued by the instructor and their fellow classmates. The students will provide their own digital camera or 35mm single lens reflex cameras, memory card, and film processing.

PHTC 55005  Fundamentals of Photography  4.8 Credits  
An introduction to camera operation and image production, composition, flash usage, and use of exposure meters and filters.
COMMUNICATIONS (COMM)

COMM 1307 Introduction to Mass Communications 3 Credits (3 Lec, 0 Lab)
This course surveys the basic content and structural elements of mass media, as well as their functions and influences on society.
Prerequisite(s): Reading Level 7

Course Type: Academic

COMM 1318 Beginning Photography 3 Credits (1 Lec, 5 Lab)
This course offers an introduction to the basics of photography, including techniques and equipment operation. Students will not receive credit for both ARTS 2356 and COMM 1318.

Course Type: Academic

COMM 1319 Intermediate Photography 3 Credits (1 Lec, 5 Lab)
This course offers further development of techniques with emphasis on content and composition of photographs, including experience in a variety of professional and technical areas. Students will not receive credit for both ARTS 2357 and COMM 1319.
Prerequisite(s): COMM 1318 or ARTS 2356 or department chair approval

Course Type: Academic

COMM 1335 Introduction to Electronic Media 3 Credits (3 Lec, 0 Lab)
This course provides an overview of the development, regulation, economics, social impact, and industry practices in electronic media.
Prerequisite(s): Reading level 7

Course Type: Academic

COMM 2311 Media Writing 3 Credits (3 Lec, 0 Lab)
This course offers students an introduction to the fundamentals of writing for the mass media. Includes instruction in professional methods and techniques for gathering, processing, and delivering content.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

COMM 2315 News Reporting 3 Credits (3 Lec, 0 Lab)
This course focuses on advanced news-gathering and writing skills. It concentrates on the three-part process of producing news stories: discovering the news, reporting the news, and writing the news in different formats.
Prerequisite(s): Reading level 7, Writing level 7, COMM 2311

Course Type: Academic

COMM 2327 Introduction to Advertising 3 Credits (3 Lec, 0 Lab)
This course offers students an introduction to the fundamentals of advertising including marketing theory and strategy, copywriting, design, and selection of media.
Prerequisite(s): Reading level 7

Course Type: Academic

COMM 2330 Introduction to Public Relations 3 Credits (3 Lec, 0 Lab)
This course explores the history and development of public relations. It presents the theory behind, and the process of public relations including the planning, implementation, and evaluation of PR campaigns.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

COMM 2339 Writing for Electronic Media 3 Credits (3 Lec, 0 Lab)
This course introduces gathering, editing, and presenting news and public service programs, documentaries, commercials, and special programs for radio, television and other forms of electronic media.
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Academic

COMM 19002 Reporting I 0 Credits

San Jacinto College 2018-2019
COMPUTER INFO TECH (GAME)

GAME 1303  Introduction to Game Design and Development  3 Credits  (2 Lec, 2 Lab)
This course is an introduction to electronic game development and game development careers and includes an examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. The course includes designing and implementing simple computer games.
Course Type: Technical

GAME 1304  Level Design  3 Credits  (2 Lec, 2 Lab)
This course is an introduction to the tools and concepts used to create levels for games and simulations which incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling, and includes utilization of toolsets from industry titles.
Course Type: Technical

GAME 1343  Game and Simulation Programming I  3 Credits  (2 Lec, 2 Lab)
This course covers game and simulation programming. It includes advanced pointer manipulation techniques and pointer applications, points and vectors, sound, and graphics.
Prerequisite(s): ITSE 1307 or COSC 1337 or GAME 1303 or department chair approval
Course Type: Technical

GAME 2332  Project Development I  3 Credits  (2 Lec, 2 Lab)
This course includes skill development in an original modification based on a current game engine. It includes management of version control; development of project timelines; integration of sound, models, and animation; production of demos; and creation of original levels, characters, and content for a real-time multiplayer game. It applies skills learned in previous classes in a simulated real-world design team experience.
Prerequisite(s): GAME 1304 or department chair approval
Course Type: Technical

GAME 2341  Game Scripting  3 Credits  (2 Lec, 2 Lab)
This course covers scripting languages with emphasis on game concepts and simulations.
Prerequisite(s): GAME 1304 or department chair approval.
Course Type: Technical

GAME 2359  Game & Simulation Group Project  3 Credits  (2 Lec, 2 Lab)
This course focuses on the creation of a game and/or simulation project utilizing a team approach. It includes the integration of design, art, audio, programming, quality assurance.
Prerequisite(s): GAME 2332 or department chair approval
Course Type: Technical

GAME 55000  Introduction to Game Design and Development  6.4 Credits
This course is an introduction to electronic game development and game development careers and includes an examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. The course includes designing and implementing simple computer games. (GAME 1303)
INNEW 2340  Object-Oriented Design - Game Design  3 Credits  (2 Lec, 2 Lab)
This course is a study of large system analysis and design concepts from the object-oriented perspective. It includes determining required objects and their interfaces, and it also covers relationships between objects.
Course Type: Technical
ITCC 1308  Introduction to Voice over Internet Protocol (VoIP)  3 Credits
(2 Lec, 2 Lab)
This course covers basic concepts of voice over internet protocol (VoIP). Focuses on technology integration of and data transmission in network communications.
Prerequisite(s): ITCC 1301 or ITNW 1325

Course Type: Technical

ITCC 1314  CCNA 1: Introduction to Networks  3 Credits
(2 Lec, 3 Lab)
This course covers networking architecture, structure, and functions; introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. Prerequisite or Co-requisite(s): ITSC 1305 or department chair approval

Course Type: Technical

ITCC 1440  CCNA 2: Routing and Switching Essentials  4 Credits
(3 Lec, 2 Lab)
This course describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks.
Prerequisite(s): ITCC 1314 or department chair approval

Course Type: Technical

ITCC 2412  CCNA 3: Scaling Networks  4 Credits
(3 Lec, 2 Lab)
CCNA R&S: Scaling Networks (ScanN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols.
Prerequisite(s): ITCC 1440 or department chair approval

Course Type: Technical

ITCC 2413  CCNA 4: Connecting Networks  4 Credits
(3 Lec, 2 Lab)
This course explains WAN technologies and network services required by converged applications in a complex network; enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements.
Prerequisite(s): ITCC 1440 or department chair approval

Course Type: Technical

ITCC 41001  Cisco Local Academy Instructor  2.4-6.4 Credits
ITCC 41002  Local Area Networks Design and  6.4-11.2 Credits
ITCC 41003  Cisco Local Academy Instructor  3.2-6.4 Credits
ITCC 41004  Cisco Local Academy Instructor  3.2-6.4 Credits
ITCC 41005  Cisco Local Academy Instructor  3.2-6.4 Credits
ITCC 41006  Basic Router Configuration: C  6.4-11.2 Credits
ITCC 41007  Cisco Local Academy Instructor  3.2-6.4 Credits
ITCC 41008  Cisco Local Academy Instructor  0.8-3.2 Credits
ITCC 41009  Voice and Data Cabling  6.4-11.2 Credits
ITCC 41010  Cisco Local Academy Instructor  0.8-1.6 Credits
ITCC 41042  Local Area Management (LAN): C  6.4-11.2 Credits
ITCC 41046  Wide Area Management (WAN): C  6.4-11.2 Credits
ITCC 42007  Fundamentals of UNIX  6.4-11.2 Credits
ITCC 42032  Advanced Routing Configuration  6.4-11.2 Credits
ITCC 42036  Building Remote Access Network  6.4-11.2 Credits
ITCC 42040  Configuring LAN Switches: Cisco  6.4-11.2 Credits
ITCC 42044  Internetwork Troubleshooting:  6.4-11.2 Credits
ITCC 49001  CISCO (H.S.)  60 Credits
ITCC 55000  CCNA 1: Networking Basics  8 Credits
A course introducing the basics of networking including network terminology, local area networks (LAN) and wide area networks (WAN). This course develops skills in the design and installation of local area networks to ensure optimal network performance. Topics include cabling, cable closets, management devices, and installation of network devices, protocols and sub netting. This course includes an overview of networking technologies and an in-depth study of networking technologies, including IP addressing and sub-networking. This course will help prepare the student for the Cisco Certified Network Associate (CCNA) exam. (ITCC 1402)
Prerequisite(s): ITSC 1305 or department chair approval.

ITCC 55001  CCNA 2: Router & Routing Basics  8 Credits
Learn the basics of Cisco router configuration: configure, manage, and troubleshoot routers using TCP/IP, RIP, IGRP, and EIGRP; create and apply access control lists. (ITSC 1406)

ITCC 55002  Cisco Exploration 2-Routing Protocols  6.4 Credits
Prerequisite(s): Cisco Exploration 1 Note: Textbook required Learn architecture, operation of routers, and routing protocols; analyze, configure, verify, and troubleshoot RIPv1, RIPv2, EIGRP, and OSPF. (ITCC 1404)

ITCC 55003  Cisco Exploration 3 - LAN Switching & Wireless  6.4 Credits
Learn how switches operate in a LAN environment for small and large networks; VLAN, Rapid Spanning Tree Protocol, VLAN Trunking Protocol. (ITCC 2408)

ITCC 55004  Cisco Exploration 4 - Accessing the WAN  6.4 Credits
Prerequisite(s): Cisco Exploration 1, Cisco Exploration 2 Note: Textbook required Learn traffic control principles, access control lists, and protocols at the data link layer for wide-area access. Implement PPPoE, DSL, and Frame Relay. (ITCC 2410)
ITCC 55005  Cisco Exploration 1 - Network Fundamentals  6.4 Credits
Prerequisite(s): ITSC 1305 or department chair approval Note: Textbook required, flash drive required. This course introduces the architecture, structure, functions, components, and models of the Internet. It describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link, and physical layers. It covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations. The students will build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. (ITCC 1401)
**COMPUTER INFO TECH (ITNW)**

**ITNW 1313 Computer Virtualization 3 Credits (2 Lec, 2 Lab)**
This course explores the implementation and support virtualization of client servers in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers.
Course Type: Technical

**ITNW 1325 Fundamentals of Networking Technologies 3 Credits (2 Lec, 2 Lab)**
This course covers instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.
Course Type: Technical

**ITNW 1345 Implementing Network Directory Services 3 Credits (2 Lec, 2 Lab)**
This course explores the implementation and support of virtualization workstation and servers.
Course Type: Technical

**ITNW 1353 Supporting Network Server Infrastructure 3 Credits (2 Lec, 2 Lab)**
This course covers installing, configuring, managing, and supporting a network infrastructure. (Non-vendor specific course.)
Prerequisite(s): ITNW 1354 or department chair approval
Course Type: Technical

**ITNW 1354 Implementing and Supporting Servers 3 Credits (2 Lec, 2 Lab)**
This is a course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.
Prerequisite(s): ITSC 1305 or department chair approval
Course Type: Technical

**ITNW 2352 Administering SQL Server 3 Credits (2 Lec, 2 Lab)**
This is a skills development course in the installation, configuration, administration, and troubleshooting of SQL Servers client/server database management system version.
Prerequisite(s): ITSW 2337 and ITNW 1325 or department chair approval
Course Type: Technical

**ITNW 2354 Internet/Intranet Server 3 Credits (2 Lec, 2 Lab)**
This course covers advanced concepts in the designing, installing, and administration of an Internet/Intranet server.
Prerequisite(s): ITNW 1325 or ITCC 1314 or department chair approval
Course Type: Technical

**ITNW 35003 Internet Basic/paraprofessiona 1.6 Credits**
**ITNW 41001 Introduction to Computer Based 0.7-3.2 Credits**
**ITNW 41004 Network I 1.6-3.2 Credits**
**ITNW 41007 Internet, Basic 0.7-3.2 Credits**
**ITNW 41010 UNIX 1.6-3.2 Credits**
**ITNW 41012 Fundamentals of Information Se 4.8-12.8 Credits**
**ITNW 41014 Netware Networking Essentials 4.8-11.2 Credits**
**ITNW 41016 NetWare Administration 4.8-11.2 Credits**
**ITNW 41020 NetWare 5 Administration 4.8-11.2 Credits**
**ITNW 41041 Data Communications 1.6-3.2 Credits**
**ITNW 41042 GroupWise 5 Administration 4.8-11.2 Credits**
**ITNW 41043 Netware Technologies (Novell 5 3.2-6.4 Credits**
**ITNW 41044 Computer Based Communications 3.2-9.6 Credits**
**ITNW 41045 Implementing Network Directory 4.8-11.2 Credits**
**ITNW 41046 Microsoft Exchange Server - Co 4.8-11.2 Credits**
**ITNW 41047 Intermediate Computer Based Co 0.7-3.2 Credits**
**ITNW 41048 Implementing and Supporting Cl 4.8-11.2 Credits**
**ITNW 41050 Internet, Intermediate 0.7-3.2 Credits**
**ITNW 41052 Micro Hardware 1.6-3.2 Credits**
**ITNW 41053 Internetworking Microsoft TCP/ 4.8-11.2 Credits**
**ITNW 41054 Implementing and Supporting Se 4.8-11.2 Credits**
**ITNW 41055 Network II 1.6-3.2 Credits**
**ITNW 41056 Implementing Microsoft Interne 4.8-11.2 Credits**
**ITNW 41057 UNIX: Shell Programming 1.6-3.2 Credits**
**ITNW 41059 World Wide Web 0.7-3.2 Credits**
**ITNW 41091 Special Topics in Information 0.7-11.2 Credits**
**ITNW 41092 Special Topics in Business Sys 0.7-11.2 Credits**
**ITNW 42001 Administering Microsoft Window 4.8-11.2 Credits**
**ITNW 42002 Netware Service and Support 4.8-12.8 Credits**
**ITNW 42003 IntraNetware Design and Implem 4.8-11.2 Credits**
**ITNW 42006 Advanced Network Administratio 4.8-11.2 Credits**
**ITNW 42008 Directory Services Design and 4.8-11.2 Credits**
**ITNW 42011 Netware: Integrating Windows 4.8-11.2 Credits**
**ITNW 42013 Networking Hardware 4.8-11.2 Credits**
**ITNW 42015 Introduction to Wide Area Netw 4.8-12.8 Credits**
**ITNW 42017 Network Security 4.8-11.2 Credits**
**ITNW 42030 Fundamentals of Internetworkin 3.2-6.4 Credits**
**ITNW 42031 Novell Service and Support 4.8-12.8 Credits**
**ITNW 42032 Advanced Computer Based Commun 0.7-3.2 Credits**
**ITNW 42033 GroupWise 5 Advanced Administr 4.8-11.2 Credits**
**ITNW 42034 Managing Netscape Enterprise S 4.8-11.2 Credits**
**ITNW 42036 Internet, Advanced 0.7-3.2 Credits**
**ITNW 42037 Network Management Using Manag 4.8-11.2 Credits**
**ITNW 42038 NetWare 5 Advanced Administrat 4.8-11.2 Credits**
**ITNW 42040 Network Service and Support 1.6-3.2 Credits**
**ITNW 42041 NetWare: Integrating Windows 4.8-11.2 Credits**
ITNW 55002  Network + Boot Camp  6.4 Credits
Prerequisite(s): A+ certification is recommended. Note: LABSim is included; flash drive is recommended. This 64-hour comprehensive hands-on program will provide the knowledge and skills needed perform tasks commonly performed by IT network professionals such as the management of hardware and software networking components, IP configuration, setting up wireless and wired networks, managing networks, performing basic network security, software updates and hardware upgrades.

ITNW 55003  MS 2810: Fundamentals of Network Security  3.2 Credits

ITNW 55004  Networking Fundamentals  1.6 Credits
Note: Textbook required, flash drive required. This course is a great place to start to learn the basics of networking. This introductory lecture course surveys fundamental networking concepts and practices. Examine topics such as network architecture and standards, cabling and topologies, networking protocols, network servers, server-side scripting, database connectivity and security basics.

ITNW 55005  Cisco Networking Technologies  2.8 Credits
This hands-on introductory course will give you the basics and prepare you for further fast track CCNA offerings by beginning with an introduction to internetworking and the OSI model. Use Cisco 1600/1700/2500 series routers to apply the Cisco internetwork operating system (IOS). You will use the interface to start up and configure a newly installed Cisco router and switch. You will be able to perform all basic configurations and procedures to build a multi-router, multigroup network using LAN and WAN interfaces for the most common routing and routed protocols.

ITNW 55006  HTML: Web Page Authoring Fundamentals  1.6 Credits
Catch up with the rest of the world on the Web. Learn to create web pages using Hypertext markup language (HTML). Students will plan content and structure of a basic web page. Topics will include tables, formatting, images and colors.

ITNW 55007  Internet Fundamentals  1.6 Credits
Prerequisite(s): Windows Operating Systems or equivalent knowledge Note: Textbook required Learn to navigate the Internet. Explore Web browsers, electronic mail, newsgroups, file transfer protocol, and much more. Take a tour of search engines and business resources on the World Wide Web. This course will help you build Internet knowledge and foundation skills that can transport you to further destinations in Web specialization. Acquire partial certification level knowledge required to pass the optional IC3 exam.

ITNW 55008  MS 2810: Fundamentals of Network Security  3.2 Credits
This hands-on, instructor-led course provides students with the knowledge and skills to begin supporting network security within an organization. Students who complete this course will be able to identify security threats and vulnerabilities, and help respond to and recover from security incidents. This course prepares students for CompTIA’s Security + exam.

ITNW 55010  Fundamentals of Networking Technologies  9.6 Credits
Prerequisite(s): ITSC 1305 or Department Chair Approval. Note: Textbook required, flash drive required. Additional distance learning fees for online or hybrid courses will be assessed at time of payment. Learn networking essential concepts and implementation; network protocols; transmission media; hardware and software; how to connect servers and clients in a network. (ITNW 1325)

ITNW 55011  E-Commerce-Marketing to the Masses  0.7 Credits
Learn how to use the web to open up the doors to all sorts of low-cost marketing opportunities for small businesses. Learn the tricks and trades in e-commerce that bring in, qualifies and measures sales. Learn to leverage the web to stand out above the crowd and get noticed. Discover how to get the right message to the right hands for the best return on investment. Learn how to make your website usable, searchable and profitable.

ITNW 55012  MS 2151 Network & OS Essentials  2.1 Credits
This authorized Microsoft introductory course will provide you with the knowledge necessary to understand and identify the tasks involved in supporting Microsoft Windows 2003 networks. It includes an overview of networking concepts and how they are implemented in this operating system. Other topics include administering, securing, and examining a network, as well as coverage of network protocols, Internet Protocol(IP) addressing and Web services.

ITNW 55013  MS 2373: Programming with MS Visual Basic.NET  4 Credits
This is the first course in the Visual Basic .NET curriculum and will serve as the entry point for other.net courses. This instructor led course provides students with the knowledge and skills needed to develop applications in Microsoft Visual Basic .NET for the Microsoft .NET platform. The course focuses on user interfaces, program structure, language syntax, and implementation details.

ITNW 55014  Implementing and Supporting Servers  6.4 Credits
Prerequisite(s): ITNW 1308 or ITCC 1401 or department chair approval Note: Textbook required; flash drive recommended This course includes topics such as implementing, administering, and troubleshooting information systems that incorporate servers in a networked computing environment. It also includes managing accounts and resources, maintaining server resources, monitoring server performance, safeguarding data in a Microsoft Windows Server 2008 environment, development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows Based Servers in a networked computing environment, setting up servers for various client computers, configuring directory replication, managing licensing, user group accounts, user profiles, administering remote servers, disk resources, creating and sharing resources, implementing permissions and security, fault-tolerance, installing and configuring RAS, performance bottlenecks; and configuring problems. (ITNW 1354)

ITNW 55015  Server Administration Fundamentals  2 Credits
Prerequisite(s): Basic computer skills Note: Textbook required; DVD-RW disc required Learn server fundamentals such as managing Windows Servers (including virtualization) and storage, along with monitoring and troubleshooting servers. This course also covers such topics as essential naming, directory, and print services. Students also learn of popular Windows Network Services and Applications.

ITNW 55016  HTML/CSS  3.2 Credits
Prerequisite(s): Basic computer skills and knowledge of Windows Note: Textbook required Learn to create web pages using Hypertext markup language (HTML) and Cascading Style Sheets (CSS). Students will plan content and structure of a basic web page. Topics will include tables, formatting, images and colors.
ITNW 55017 Internet/Intranet Server 6.4 Credits
Prerequisite(s): Fundamentals of Networking or Cisco Expl1 NW Fundamentals
Note: Textbook and flash drive required This course covers designing, installing, configuring, maintaining, and managing an Internet/Intranet server. Topics include workstation maintenance and Internet-related protocols, implementation of Internet servers such as World Wide Web (WWW), file transfer protocols (FTP), news-groups and email. It also includes hands-on experience building web servers. (ITNW 2354)

ITNW 55018 Supporting Network Service Infrastructure 6.4 Credits
Prerequisite(s): ITNW 1354 or ITMT 1340 Note: Textbook required This course provides the student with skills necessary to install, configure, manage, monitor, support, and troubleshoot a network infrastructure that uses the Microsoft Windows server family of products such as DHCP, DNS, Certificates, Routing protocols, L2TP, NAT, configuring security using Public Key, and deployment of Windows using remote installation services. (ITNW 1353)

ITNW 55019 Implementing Network Directory Services 6.4 Credits
Prerequisite(s): ITNW 1354 or ITMT 1340. Note: Textbook required. This course provides students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows 2003 Active Directory services. The course focuses on Implementing Group Policy Objects, deploying software by using group policies, configuring Domain Name System (DNS) to manage name resolution, schema and replication, use of Active Directory to manager users, groups, shared folders, and network resources. Students also learn how to implement and troubleshoot security in a directory services infrastructure and monitor and optimize Active Directory performance. This course also provides the student with experience in managing and troubleshooting software using group policies. (ITNW 1345)

ITNW 55020 Internet Safety for Kids 1.6 Credits

ITNW 55021 CCNA Boot Camp I 4 Credits
Prerequisite(s): Basic computer literacy. Basic Internet usage skills. Basic PC operating system navigation skills. Basic IP address knowledge. Note: Materials provided This first course will prepare the student for Cisco’s ICND1 exam. This is the first of two exams required for the CCNA certification. Using a lab simulator, the student will conduct lab exercises that cover Network Fundamentals, LAN Switching Fundamentals, Routing Fundamentals, Infrastructure Services, and Infrastructure Maintenance.

ITNW 55022 CCNA Boot Camp II 4 Credits
Prerequisite(s): CCNA Boot Camp I Note: Materials provided This second course will prepare the student for Cisco’s ICND2 exam In this hands-on technical course, you will use the lab simulator to cover LAN Switching, Routing Technologies, WAN Technologies, Infrastructure Services, and Infrastructure Maintenance. This Boot Camp in conjunction with CCNA Boot Camp I will definitely prepare you to pass the CCNA exam.

ITNW 55023 Certified Network+ System Manager 4 Credits
Prerequisite(s): Networking Fundamentals or work experience in networking technologies. This course will build upon your previous course work or your practical work experience to prepare you to take the CompTIA Network+ exam. At a fast pace, you will cover all of the objectives of the exam and take several different practice exams. You will study the roles of a network systems manager along with the methodology for setting up a Local Area Network (LAN). You will cover topics that include the major components of a network, security, rights, commands, logins, menus, shells, directory structures, and network features. You will develop a network plan, a plan to create and administer user accounts and groups; and setup network file systems.

ITNW 55024 Network+ Certification Prep 4.8 Credits
Assist individuals in preparing for the Computing Technology Industry Association (CompTIA) Network+ Certification exam and career as a networking professional. Students will be able to identify and define terminology, hardware and software components of computer networks; utilize equipment, protocols, and topologies to differentiate between various network systems; demonstrate skills in installing network hardware, software, and cable; troubleshoot network connectivity; configure network protocol; and install and configure network client software.

ITNW 55025 Computer Virtualization 6.4 Credits
In this introductory class you will learn to implement and support virtualization of clients and servers in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers.
COMPUTER INFO TECH (ITSC)

ITSC 1305 Introduction to PC Operating Systems  3 Credits  (2 Lec, 2 Lab)
This course is an introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.
Course Type: Technical

ITSC 1307 UNIX Operating System I  3 Credits  (2 Lec, 2 Lab)
This course covers an introduction to the UNIX operating system, including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts.
Prerequisite(s): ITSC 1305 or department chair approval
Course Type: Technical

ITSC 1309 Integrated Software Applications I  3 Credits  (2 Lec, 2 Lab)
This course covers an introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. It includes instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Fundamentals of personal computer operations and the Windows operating system will also be covered. Student will only receive 3 semester credit hours for either ITSC 1309 or BCIS 1305.
Course Type: Technical

ITSC 1319 Internet/Web Page Development  3 Credits  (2 Lec, 2 Lab)
This course includes instruction in the use of Internet concepts and the introduction to web page design and website development.
Course Type: Technical

ITSC 1321 Intermediate PC Operating Systems  3 Credits  (2 Lec, 2 Lab)
The course covers custom operating system installation, configuration, and troubleshooting. Topics include installation and configuration, file management, memory, storage and peripheral devices.
Prerequisite(s): ITSC 1325 or department chair approval
Course Type: Technical

ITSC 1325 Personal Computer Hardware  3 Credits  (2 Lec, 2 Lab)
This course is a study of current personal computer hardware, including personal computer assembly, upgrading, setup and configuration, and troubleshooting.
Course Type: Technical

ITSC 2321 Integrated Software Applications II  3 Credits  (2 Lec, 2 Lab)
This course is an intermediate study of computer applications from business productivity software suites. It also covers instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software.
Prerequisite(s): ITSC 1309 or department chair approval
Course Type: Technical

ITSC 2331 Integrated Software Apps III  3 Credits
Course Type: Technical

ITSC 2336 Unix Operating System II  3 Credits
Course Type: Technical

ITSC 2337 UNIX Operating System II  3 Credits  (2 Lec, 2 Lab)
This course is a continued study of the UNIX operating system commands. It includes topics such as CGI and scripting languages.
Prerequisite(s): ITSC 1307 or department chair approval
Course Type: Technical

ITSC 2339 Personal Computer Help Desk  3 Credits  (2 Lec, 2 Lab)
This course covers diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Emphasis will be placed upon hands-on training (e.g., participation in the construction of an expert system).
Prerequisite(s): ITSC 1325 or ITSC 2321 or department chair approval
Course Type: Technical

ITSC 2364 Practicum - Computer and Information Sciences, General  3 Credits  (0 Lec, 21 Lab)
This practicum class is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): 15 credit hours of computer courses (9 of these credit hours must be earned at San Jacinto College) which must include at least one of the following courses: ITCC 1440, ITNW 1354, ITNW 2354, ITSE 1359, ITSE 2313, ITSE 2331, ITSW 2334, or ITSW 2337. An accumulative GPA of at least 2.0 is required. An interview and department chair approval are required 60 days prior to enrollment.
Course Type: Technical

ITSC 25019 IC3 Cert. Prep - Complete  2.8 Credits
ITSC 25020 IC3 CertPrep-ComputingFundamen  0.8 Credits
ITSC 25021 IC3 CertPrep-Key Applications  1.2 Credits
ITSC 25022 IC3 Cert. Prep - Living Online  0.8 Credits
ITSC 29003 IC3 Exam-Computer Fundamentals  0 Credits
ITSC 29004 IC3 Exam - Key Applications  0 Credits
ITSC 29005 IC3 Exam - Living Online  0 Credits
ITSC 29006 Voucher-Based IC3 Exam Fee  0 Credits
ITSC 35028 Workplace Computer Skill - ESL  3.6 Credits
ITSC 35029 MS Project 2003  1.6 Credits

ITSC 35030 Photoshop:Digital Scrapbooking  0.08 Credits
(ITSC 1091) Create scrapbook pages using your digital photos! Students will use Photoshop to touch up their images and to create scrapbook pages. Students will learn to create patterned backgrounds, add text and embellishments to their pages. Students will need a copy of Photoshop. A 30-day trial is available
ITSC 35031 MS Proj for Prof Users Online 1.6 Credits
ITSC 35032 Beg Comput Skills for ESL Stud 2.4 Credits
ITSC 41000 PC Repair and Upgrade 0.7-4.8 Credits
ITSC 41001 Introduction to Computers 4.8-11.2 Credits
ITSC 41002 Beginning Computers 0.7-4.8 Credits
ITSC 41003 Computer Control Language 4.8-9.6 Credits
ITSC 41004 Software Application Skills Up 0.7-4.8 Credits
ITSC 41005 Introduction to PC Operating S 4.8-9.6 Credits
ITSC 41006 Introduction to Computer Opera 0.7-3.2 Credits
ITSC 41007 UNIX Operating System I 4.8-9.6 Credits
ITSC 41008 Operating Systems for Help Des 0.7-3.2 Credits
ITSC 41009 Integrated Software Application 4.8-11.2 Credits
ITSC 41010 Introduction to Hardware and/o 0.7-3.2 Credits
ITSC 41011 AS/400 Operating System I 4.8-9.6 Credits
ITSC 41013 Internet/Web Page Development 4.8-11.2 Credits
ITSC 41017 PC Operating Systems - DOS 4.8-9.6 Credits
ITSC 41021 PC Operating Systems - Windows 4.8-9.6 Credits
ITSC 41022 Beginning Computers 0.07-4.8 Credits
ITSC 41023 Intro. to Quickbooks 0.7-4.8 Credits
ITSC 41025 Personal Computer Hardware 4.8-9.6 Credits
ITSC 41026 Open VMS Operating System I 4.8-9.6 Credits
ITSC 41034 Web Development I 0.7-8 Credits
ITSC 41040 Intermediate Presentation Grap 0.7-2.4 Credits
ITSC 41042 Computer Applications in Busin 3.2-6.4 Credits
ITSC 41043 Intermediate Computer Applicat 0.7-4.8 Credits
ITSC 41044 Help Desk: Customer Service Sk 0.7-6.4 Credits
ITSC 41046 Computer Operating Systems 3.2-9.6 Credits
ITSC 41047 Intermediate Computer Operatin 0.7-3.2 Credits
ITSC 41050 Intermediate Hardware and/or S 0.7-3.2 Credits
ITSC 41091 Special Topics in Computer and 0.7-11.2 Credits
ITSC 41092 Special Topics in Business Com 0.7-11.2 Credits
ITSC 42021 Integrated Software Application 4.8-12.8 Credits
ITSC 42031 Integrated Software Applicatio 4.8-11.2 Credits
ITSC 42032 Advanced Computer Applications 0.7-4.8 Credits
ITSC 42035 Application Problem Solving 4.8-11.2 Credits
ITSC 42036 Advanced Computer Operating Sy 0.7-3.2 Credits
ITSC 42037 UNIX Operating System II 4.8-9.6 Credits
ITSC 42039 Personal Computer Help Desk 4.8-9.6 Credits
ITSC 42040 Hardware and/or Software Select 3.2-9.6 Credits
ITSC 42041 Advanced Hardware and/or Softw 0.7-3.2 Credits
ITSC 42042 AS/400 Operating System II 4.8-9.6 Credits
ITSC 42045 Open VMS Operating System II 4.8-9.6 Credits
ITSC 42046 Computer Center Management 4.8-4.8 Credits
ITSC 55000 Personal Computer Hardware 6.4 Credits
Prerequisite(s): ITSC 1305 or department chair approval Note: Textbook is required This course is a study of current personal computer hardware, including personal computer assembly and upgrade, setup and configuration, and troubleshooting. Major topics include an overview of PC hardware, computer opportunities. Learn to create strong passwords and how to switch users. You will be introduced to Live Tiles and learn to start and control apps. Next you will join others in the cloud as you create computer accounts and resources. These tasks include managing user, computer, and group accounts; managing access to network resources; managing printers; managing an organizational unit in a network based on Active Directory directory service; and implementing Group Policy to manage users and computers.

ITSC 55001 Linux-Introduction 3.2 Credits
Enter the growing world of UNIX via the Linux operating system. Designed for students with no previous UNIX background, this class will introduce you to Linux operations, the Linux file system and commands, text editing, shell commands and shell scripts. In this hands-on workshop, install the Linux kernel using Red Hat Linux and receive software for added practice.

ITSC 55002 Linux Administration 3.2 Credits
Learn the Network Operating System (NOS) that the Internet was created with: UNIX. You will develop the skills needed to administer a standalone or networked UNIX/Linux system and peripherals. Strengthen your comprehension of Linux file systems, user account management, system security, system backup, printing and terminal handling, configuration of Linux kernels, Single Number System (SNS), Network Information Service (NIS), Network File System (NFS), Linux remote commands and electronic mail.

ITSC 55003 ST: Business Applications 7.2 Credits
Continue to develop your marketable job skills in the second module of the Business Applications User Program. Become an effective user of Microsoft Word, Excel and Access; as well as PowerPoint and Microsoft FrontPage. Learn how to increase productivity by integrating these tools to produce professional looking end-results.

ITSC 55004 MS 2274: Manging MS Windows Server 2003 Environment 4 Credits
This instructor-led course provides students with the knowledge and skills to manage accounts and resources in a Microsoft Windows Server 2003 environment. The course is intended for systems administrator and systems engineer candidates who are responsible for managing accounts and resources. These tasks include managing user, computer, and group accounts; managing access to network resources; managing printers; managing an organizational unit in a network based on Active Directory directory service; and implementing Group Policy to manage users and computers.

ITSC 55005 MS 2275: Maintaining a MS Windows Server 2003 Environment 2.4 Credits
This instructor-led course provides students with the knowledge and skills that are needed to effectively maintain server resources, monitor server performance, and safeguard data on a computer running one of the operating systems in the Microsoft Windows Server 2003 family.

ITSC 55008 Windows for the Desktop 1.6 Credits
Prerequisite(s): Computer Concepts or equivalent knowledge. Note: Textbook required. Flash drive recommended. Open the Window of computer opportunities. Learn to create strong passwords and how to switch users. You will be introduced to Live Tiles and learn to start and control apps. Next you will join others in the cloud as you create a Microsoft Online account and log into OneDrive and other online apps. You will create web notes in Edge and say “hey” to Cortana. Most importantly, you will learn to manage your files and folders and how to defend yourself from web threats.

ITSC 55010 MS Office 1.4 Credits
A comprehensive introduction to popular business productivity software applications including MS Word, Excel, and PowerPoint. This comprehensive course in business applications emphasizes industry standard computer operation and applications.
ITSC 55011  IC3 Studies  3.2 Credits

ITSC 55013  Integrated Software Applications  6.4 Credits
Note: Textbook required, flash drive is recommended. A study of the integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software is presented. Fundamentals of personal computer operations and the Windows operating system will be covered. (ITSC 1309)

ITSC 55014  Introduction to Computers  4.8 Credits
This course is an overview of computer information systems. It introduces computer hardware, software, procedures, and human resources, and explores integration and application in business and other segments in society. Fundamentals of computer problem solving and programming may also be discussed and applied. It also examines applications and software relating to specific curricular areas. (ITSC 1301)

ITSC 55015  Maritime Computer Skills-Basic  0.8 Credits
Learn basic parts of a computer, how to access and search the internet, learn MS Office programs, incl. Word, Excel & Outlook and apply computer skills and maritime technology to the workplace.

ITSC 55016  Microsoft Project-Introductory Skills  1.6 Credits
Prerequisite(s): Project Management experience or equivalent knowledge helpful. Note: Textbook required Learn introductory topics needed to effectively use Microsoft Project software in home and business situations. You will learn to create a new project plan, manage project tasks and resources. Finally you will learn to finalize a plan and set it as a baseline.

ITSC 55017  Microsoft Project - Advanced Skills  1.6 Credits
Prerequisite(s): Microsoft Project Introductory Skills or equivalent knowledge Note: Textbook required Build upon your basic project-management software skills. Learn to adjust the time and scope of your project, benchmark your project, track costs, create reports and much more.

ITSC 55018  Computer Concepts  1.6 Credits
Note: Textbook required; flash drive recommended This inviting introductory computer literacy course, covers computer concepts in a highly visual way. Understand the key principles you need to know about hardware, operating systems, productivity software, networks, and the Internet. Information is geared toward the end-user, focusing on partial certification level knowledge required for every worker in today's wired world and for passing one of the three IC3 certification exams.

ITSC 55019  Windows Vista - One Day  0.7 Credits
Discover the totally new user experience offered by Microsoft Windows Vista! Microsoft's new operating system provides a new user interface and a host of new features to improve your productivity. The new Windows Vista introduces a breakthrough user experience and is designed to help you feel confident in your ability to view, find, and organize information and to control your computing experience.

ITSC 55020  Windows for the Desktop - Technical  0.8 Credits
This course is intended for persons with a basic understanding of Microsoft Windows who need to gain the skills necessary to create, edit, format, and print basic Microsoft® Excel 2003 worksheets. This course will provide the participant with the basic concepts to create and edit basic Microsoft® Office Excel 2003 worksheets and workbooks.

ITSC 55022  Microsoft Project-Basic Skills  0.8 Credits
Examine the critical skills necessary to create and modify a project plan file that contains tasks, resources, and resource assignments using Microsoft Project. Create a project plan, insert tasks and their durations, and create a project specific calendar. Create a work breakdown structure for your project, and define task constraints. Create a set of resources, and use Microsoft Project's easy to use tools to assign the resources to tasks. View your project's critical path, save the project baseline to help you monitor your project's progress, and view that data through a variety of built-in reporting tools.

ITSC 55025  UNIX Operating Systems I Linux  6.4 Credits
Study the UNIX operating system, multi-user concepts, terminal emulation, basic commands, and writing script files. (ITSC 1307)

ITSC 55026  Microsoft Project - Intermediate skills  0.7 Credits
This course will build upon knowledge gained in the Basic course, and give the participant the opportunity to work with a project plan once it has entered the project implementation phase.

ITSC 55027  MS Project-Introductory Skills  0.8 Credits
ITSC 55028  MS Project Advanced Skills  0.8 Credits
ITSC 55029  ST: Business Applications Basic  5.6 Credits
ITSC 55030  ST: Intro to Business Applications  1.8 Credits
ITSC 55032  Introduction to Mainframe  9.6 Credits
Address current events, skills, knowledge, and attitudes/behaviors pertinent to technology or occupation and relevant to professional development of the student.

ITSC 55033  Microsoft Project-Complete  1.4 Credits
Microsoft® Office Project Professional acts as a tool that assists you in managing your projects. In this course, you will create and modify a project plan. You will exchange project plan data with other applications, update project plans, create visual reports, and reuse project plan information.

ITSC 55034  MS Office 2007 Upgrade-One Day  0.8 Credits
Discover the complete re-design of Microsoft Office. This fast-paced training is for experienced Office 2003 users who need to get up to speed quickly on Office 2007.

ITSC 55035  MS Office 2007 Upgrade  1.6 Credits
Become familiar with all of the features of Office 2007. You will add a new level of professionalism to your documents, enhance your spreadsheets, create dynamic presentations, learn the new features of Access, and Outlook.

ITSC 55036  MSOffice 2007 Upgrade Contract  1.4 Credits
Quickly upgrade your MS Word 2003 skills to Word 2007 to maintain productivity on the job.

ITSC 55037  Call Center Skills  0.7 Credits
The call center is the “voice” of the organization. This course discusses the benefits of good telephone service and provides guidelines for providing quality and timely service.

ITSC 55038  IC3 Prep  0.8 Credits
This course is an exam preparatory course for the Internet and Computing Core Certification exam. You will use practice test software that simulates the real test and testing environment. The price of the course includes the testing fee.
ITSC 55039 Linux 2.4 Credits
ITSC 55040 Maritime Computer Skills - Advanced 0.8 Credits
ITSC 55042 Windows XP-One Day 0.7 Credits
Learn to create, copy, and delete files using operating systems; enter and edit data; navigate files and folders; and execute programs.

ITSC 55043 Intermediate PC Operating Systems 4.8 Credits
Prerequisite(s): Introduction to PC Operating Systems Note: Textbook required, flash drive required. This course covers advanced operating system installation, configuration, and troubleshooting. Topics include installation and configuration, file management, memory and storage management, continued study in advanced installation, configuration troubleshooting, advanced file management, memory, storage management, update peripheral device drivers, and use of utilities to increase system performance. (ITSC 1321)

ITSC 55044 Personal Computer Help Desk 6.4 Credits
Prerequisite(s): ITSC 2331 Integrated Software Applications II or Department Chair approval Note: Textbook required, flash drive recommended. Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects (ITSC 2339)

ITSC 55045 Basic Business Applications 3.2 Credits
Prerequisite(s): Windows for the desktop or equivalent knowledge Note: Textbook is required; flash drive is recommended. Learn the commonalities of the Microsoft Office Programs and practice using the basic features of Windows, Microsoft Word, Excel and PowerPoint programs.

ITSC 55046 Internet/Web Page Development 6.4 Credits
Note: Textbook required This course includes instruction in the use of Internet concepts and the introduction to Web page design and website development. It is an introduction to designing and publishing Web documents. It includes basic markup language, hyperlinks, tables, frames, images, forms, and an exploration of tools available for creating and editing Web documents. Additional distance learning fees for online or hybrid classes will be assessed at time of payment. (ITSC 1319)

ITSC 55047 Introduction to Prima Vera 2.4 Credits
Using the Oracle Prima Vera project management tool, students will learn to plan, schedule and control various projects. They will learn to use the collaboration feature to communicate with team members to ensure project's success.

ITSC 55048 ST: MOS Training 8 Credits
Master two of the most sought after informational worker skills, Microsoft Excel and Microsoft Access. You will learn all of the objectives required to pass the Core certification exams for both applications.

ITSC 55049 Intro to PC Operating Systems 6.4 Credits
Prerequisite(s): Basic Computer skills. Note: Textbook required; flash drive required. This course covers a study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices and use of utilities. Operating systems covered include DOS, Windows and UNIX. (ITSC 1305)

ITSC 55050 Integrated Software Apps II 6.4 Credits
Prequisite: Integrated Software Applications I This course is a continued study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentations media software. (ITSC 2321) Note: Textbook and flash drive required.

ITSC 55051 Windows Operating System Fundamentals 2 Credits
Note: Textbook required, flash drive required In this course you will learn to install, configure and manage the Windows 7 operating system. This course will present the essential tasks of operating system configuration and maintenance and provide hands-on experience. You will learn the wide variety of tools and techniques that allow administrators in various job settings to perform these essential tasks efficiently. Finally, you will be prepared to take the MTA exam 98-349.

ITSC 55052 MS Office for Medical Professionals 3.6 Credits
Prerequisite(s): None This computer applications course will introduce you to the Windows Operating System - teaching you how to manage multiple windows, files, folders, buttons, menus and dialog boxes. You will learn the commonalities of the Microsoft Office applications. You will practice basic skills in Microsoft Word, Excel, Access and PowerPoint. This course will allow you to gain technical skills necessary to communicate professionally in any healthcare environment.

ITSC 55053 VMWare Certification 4 Credits
VMWare training and exam preparation

ITSC 55054 Installing and Configuring Windows Client 2.4 Credits
Prerequisite(s): Experience installing PC hardware and devices, understanding of TCP/IP and networking concepts, basic Windows and Active Directory knowledge, mapping network file shares, working from a command prompt, basic security concepts. Note: Textbook and flash drive required. In this course, you will learn how to install, upgrade, and migrate to Windows 7 client and you will learn to configure Windows 7 client for network connectivity, security, maintenance, and mobile computing. This course incorporates materials from the Official Microsoft Learning Product 6292: Installing and Configuring Windows 7 Client. You will learn to: Perform a clean installation of Windows 7, upgrade to Windows 7, and migrate user-related data and settings from an earlier version of Windows; Configure disks, partitions, volumes, and device drivers to enable a Windows 7 client computer; Configure file access and printers on a Windows 7 client computer; Configure network connectivity on a Windows 7 client computer; Configure wireless network connectivity on a Windows 7 client computer; Secure Windows 7 client desktop computers; Optimize and maintain the performance and reliability of a Windows 7 client computer; and to Configure mobile computing and remote access settings for a Windows 7 client computer.

ITSC 55055 N2L 50+ D.I.C.E. 2 3.2 Credits
Prerequisite(s): None: Textbook required; flash drive recommended. Learn the commonalities of the Microsoft Office Program and learn the basics of the three applications preferred by most employers - Windows, Microsoft Word, Excel and PowerPoint.

ITSC 55056 MOS Project 4 Credits
This Microsoft Project class uses the Microsoft Official Academic Course (MOAC) textbook. This course is designed to re-enforce workforce skills. In this course students learn to manage project resources, task assignments and scheduling. They will also learn about the integration and tracking of multiple projects and programs. Skills mastery of Microsoft Project can help students with classwork and differentiate job hunters in today’s competitive job market.
ITSC 55057  Basic Workplace Computer Skills  4 Credits
Prerequisite(s): None  Note: A flash drive is required. This basic computer
course will teach the basic components of a computer system. Students
will practice the fundamentals of file management - create, rename,
delete, restore, copy, paste, save and save as. Additionally, students
will use Microsoft Word to learn to create simple memos and resumes.
Students will use Microsoft Excel to create simple spreadsheets. Finally,
basic internet skills will be taught for searches and completing online
applications.

ITSC 55058  Ready or Not  2.7 Credits
This course is designed to familiarize students new to computers with
basic computer terminology, hardware, software, input (mouse and
keyboard) and output (printer and external storage) devices, as well as
the Microsoft Windows file structure. The course will also familiarize
students with web browser basics, search engines, and search strategies.
Ethical and safety concerns will also be considered. In addition, students
will learn how to register for an email account, navigate an email
interface, compose, send and receive messages, manage a contact
list, and upload and download attachments. The course will also cover
résumé & cover letter writing, online job search strategies, online job
applications, and interviews styles and techniques.

ITSC 57071  Computer Skills Workplace  2.4 Credits
**COMPUTER INFO TECH (ITSE)**

**ITSE 1307 Introduction to C++ Programming 3 Credits (2 Lec, 2 Lab)**
This course is an introduction to computer programming using C++. The emphasis is on the fundamentals of object-oriented design with development, testing, implementation, and documentation. It includes language syntax, data and file structures, input/output devices, and files. Since C++ is based on the C language, the course will also cover some C language functions and techniques. Students will learn/use standard C++ to complete assignments which give experience in coding, testing, and debugging applications.
Course Type: Technical

**ITSE 1309 Database Programming 3 Credits (2 Lec, 2 Lab)**
This is a course in database development using database programming techniques emphasizing database structures, modeling, and database access. Topics include developing database applications using a structured query language (SQL Server) to design SQL Server applications; architecture describing Transact-SQL. It also covers how to create and manage databases, implement data integrity, create queries and reports from database tables, optimize query performance, create and maintain indexes, and create appropriate documentation.
Prerequisite(s): ITSW 2337 or department chair approval
Course Type: Technical

**ITSE 1317 Java Programming 3 Credits (2 Lec, 2 Lab)**
This course is an introduction to Java programming for applications and web applets.
Prerequisite(s): ITSE 1307 or department chair approval
Course Type: Technical

**ITSE 1329 Programming Logic and Design 3 Credits (3 Lec, 1 Lab)**
This course covers programming problem-solving by applying object oriented programming and structured programming techniques, and representation of algorithms using appropriate design tools such as hierarchy charts, flowcharts, data flow charts, and pseudocode. It includes discussion of methods for testing, evaluating, and documenting programs. This course includes hands-on lab assignments to implement the techniques.
Course Type: Technical

**ITSE 1331 Introduction to Visual BASIC Programming 3 Credits (2 Lec, 2 Lab)**
This is an introduction to computer programming using Visual BASIC, with an emphasis on the fundamentals of structure design, development, testing, implementation, and documentation. The course includes language syntax, data and file structures, input/output devices, and files, sequence, branch, and loop control structures; use of sequential files; interactive screen processing; printed report generation; and event driven programming are also covered.
Course Type: Technical

**ITSE 1333 Mobile Applications Development 3 Credits (2 Lec, 2 Lab)**
This course is an overview of different mobile platforms and their development environments.
Prerequisite(s): ITSC 1319 and ITSE 1359
Course Type: Technical

**ITSE 1345 Introduction to Oracle SQL 3 Credits (2 Lec, 2 Lab)**
This course is an introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). Prerequisite or Co-requisite(s): ITSW 1307 or department chair approval
Course Type: Technical

**ITSE 1356 Extensible Markup Language (XML) 3 Credits (2 Lec, 2 Lab)**
This course is an introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL).
Prerequisite(s): ITSC 1319
Course Type: Technical
Advanced Visual Basic 3.2 Credits

Computer Programming 4.8-12.8 Credits

Introduction To Programming Languages 0.7-3.2 Credits

Programming Languages 4.8-9.6 Credits

Web Authoring and Publishing 4.8-12.8 Credits

Introduction to C++ Programming 4.8-12.8 Credits

Pascal Programming 4.8-12.8 Credits

Web Page Programming 4.8-12.8 Credits

Introduction to RPG Programming 4.8-12.8 Credits

Introduction to COBOL Programming 4.8-12.8 Credits

Programming Logic and Design 4.8-12.8 Credits

Introduction to Visual BASIC Programming 4.8-12.8 Credits

Introduction to BASIC Programming 4.8-12.8 Credits

Mastering Distributed Applications 4.8-12.8 Credits

Intro to System Analysis & Design 0.7-4 Credits

Intermediate Programming Language 0.7-3.2 Credits

Mastering Microsoft Visual Basic 4.8-12.8 Credits

Introduction to Oracle SQL and PL/SQL 4.8-9.6 Credits

System Analysis and Design 4.8-9.6 Credits

System Design Using Oracle Tools 3.2-11.2 Credits

Basics of Scripting Languages 0.7-4 Credits

ST IN COMPUTER PROGRAMMING 0.7-11.2 Credits

Special Topics in Computer Systems 0.7-11.2 Credits

Special Topics in Computer Science 0.7-11.2 Credits

Introduction to Windows Programs 4.8-12.8 Credits

Intermediate Web Programming 4.8-11.2 Credits

Introduction to Windows Programs 4.8-12.8 Credits

Database Programming 4.8-12.8 Credits

JAVA Programming 4.8-12.8 Credits

Introduction to Object-Oriented Programming 4.8-12.8 Credits

Advanced C++ Programming 4.8-12.8 Credits

Advanced Programming Languages 0.7-3.2 Credits

Implementing a Database on Microsoft Windows 4.8-12.8 Credits

Advanced RPG Programming 4.8-12.8 Credits

Assembly Language Programming 4.8-12.8 Credits

Advanced Java Programming 4.8-9.6 Credits

Advanced Windows Programming 4.8-9.6 Credits

Oracle Distributed Database 4.8-11.2 Credits

Advanced BASIC Programming 4.8-12.8 Credits

Advanced Windows Programming 4.8-12.8 Credits

Oracle Database Structure and Functionality 3.2-11.2 Credits

Data Structures 4.8-9.6 Credits

Oracle Application Development 4.8-9.6 Credits

Advanced Database Programming 4.8-12.8 Credits

Object Oriented Programming Principles 1.6 Credits

This course teaches object-oriented analysis and design techniques using the Unified Modeling Language (UML) in the context of the Unified Software Development Process. You will be introduced to object-oriented theory and software development, testing, implementation and documentation.

Visual Basic for Apps (VBA) 2.8 Credits

Open a new world of capabilities by customizing your MS Office software. Visual Basic for Applications is included in all the MS Office Products. It will extend the capabilities of Word, Excel, PowerPoint, and Outlook. Automate your MS Office suite applications by creating macros and intricate multimedia elements by using VBA.

Java Programming Language course teaches students the syntax of the Java programming language; object-oriented programming with the Java programming language; creating graphical user interfaces (GUI), exceptions, file input/output (I/O), threads and networking. Programmers familiar with object-oriented concepts can learn how to develop Java application. The course uses the Java to Software Development Kit (SDK).

Programming Basics 2.4 Credits

Do you want to get with the program? This introductory course is the place for you to start. You will encounter concepts central to structured programming, including program design, pseudo code and developing algorithms; basic terminology, data types and modularization.

C++ Introduction 3.2 Credits

Learn to program using C++. You will journey through the software lifecycle of develop, test, implement, and document as you learn the basics of object-oriented design. This programming course includes syntax, data and file structures, input/output devices and files.

Advanced C++ Programming 6.4 Credits

Further application of C++ programming techniques, including subjects such as file access, abstract data structures, class inheritance and other advanced techniques. Students will study Object Oriented Programs (OOP) by using, creating and modifying C++ classes. In addition, they will use many of the standard built-in C++ classes and data structures to solve programming assignments. (ITSE 2331)

Prerequisite(s): ITSE 1307 or department chair approval

Intro to Oracle SQL 6.4 Credits

An introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating and displaying data using Structured Query Language (SQL). (ITSE 1345) Prerequisite or Corequisite: ITSW 2337

Programming Fundamentals II 4.8 Credits

Prerequisite(s): Programming Fundamentals I Note: Textbook required

This course explores further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. The topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. (COSC 1337)

Comp Org & Mach Lang 4.8 Credits

Basic computer organization; machine cycle, digital representation of data and instructions; assembly language programming, assembler, loader, macros, subroutines, and program linkages. (COSC 2325) Prerequisite(s): COSC 1336.
ITSE 55011 Intro Visual BASIC Programming 6.4 Credits
Prerequisite(s): ITSE 1329 or department chair approval. Note: Textbook required. Additional distance learning fees for online or hybrid courses will be assessed at time of payment. Learn fundamentals of structured design, development, and documentation, language syntax, data structures, input/output devices, loop control, and interactive screen processing. (ITSE 1331)

ITSE 55012 Java Programming 6.4 Credits
Prerequisite(s): ITSE 1307 or department chair approval. Note: Textbook required, flash drive required. Learn to develop executable programs; create appropriate documentation using object-oriented programming techniques. This course emphasizes the fundamental syntax and semantics of JAVA for applications and web applets. (ITSE 2317)

ITSE 55013 Beginning Web Programming 12.8 Credits
Learn web page design and web site development, including markup language, hyperlinks, tables, frames, images, and forms. (ITSE 1311)

ITSE 55014 Introduction to C++ Programming 8 Credits
Prerequisite(s): Department chair approval or ITSE 133. Note: Textbook required. Learn structured design, development, testing and implementation; syntax; data and file structures; coding; testing; and debugging. (ITSE 1307)

ITSE 55015 System Analysis & Design Concepts 4 Credits
Learn programming concepts and utilization of computer systems; analyze system problems; and create programs.

ITSE 55017 C++ 2.4 Credits

ITSE 55019 JAVA Advanced 2.4 Credits

ITSE 55020 Intro to COBOL Programming 6.4 Credits
This course is an introduction to computer programming using COBOL. The emphasis is on the fundamentals of structured design, development, testing, implementation and documentation. It includes language syntax, data and file structures, input/output devices, files, editing, and an introduction to tables. (ITSE 1318)

ITSE 55021 Advanced Visual BASIC Programming 6.4 Credits
This course covers further applications of programming techniques using Visual BASIC. The topics include file access methods, data structures and modular programming, program testing and documentation. Additionally topics include common Graphical User Interface controls, sequential/random file processing, and database processing, and formatted screen/printer output. (ITSE 2349)

ITSE 55022 Programming Fundamentals I 4.8 Credits
Note: Textbook required This course introduces the fundamental concepts of structured programming. The topics include software development methodology, data types control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (ITSE 1329)

ITSE 55023 JAVA 3.2 Credits

ITSE 55024 SQL Programming 3.2 Credits
Structured Query Language (SQL) is the language used to work with databases and the information stored within them. In this course students will learn to query a database to SELECT the data with which they want to work. Students will use SQL to create, edit and delete data tables. Students will learn to create views, functions, and stored procedures. Students will learn SQL using Microsoft SQL Server Express.

ITSE 55025 UNIX 3.2 Credits
This course is a study of the UNIX operating system and its environment. Topics include multiuser concepts, terminal emulation, terminal communication, basic UNIX commands, and introductory system management concepts.

ITSE 55026 XML 3.2 Credits
Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL).

ITSE 55027 Sharepoint 3.2 Credits
SharePoint is Microsoft's web-based collaboration tool that allows users to share resources and create shared content. In this course, students will create and manage a SharePoint site. Students will create sites with lists, libraries, document workspaces, meeting workspaces, and more. Students will use Microsoft Office applications with SharePoint.

ITSE 55028 PHP & MySQL Introduction 2.8 Credits
Leverage the PHP language and the MySQL database to generate web applications. Covers fundamentals of PHP programming, advanced features of the language. Also teaches students a database engine independent method of accessing databases. Allows students to develop PHP applications that are portable across database engines.

ITSE 55029 Programming Logic & Design 9.6 Credits
Prerequisite(s): None Note: Textbook required, flash drive required. Take a disciplined approach to problem solving with techniques and algorithms using design tools such as charts and pseudo code. (ITSE 1329)

ITSE 55030 SQL Introduction 3.2 Credits
Structured Query Language (SQL) is the language use to work with databases and the information stored within them. In this course students will learn to query a database to SELECT the data with which they want to work. Students will use SQL to create, edit and delete data tables. Students will learn to create views, functions, and stored procedures. Students will learn SQL using Microsoft SQL Server Express.

ITSE 55031 Web Site Development Certificate Program 8 Credits
Prerequisite(s): Basic computer and Internet skills Note: Textbook required, flash drive required. This certificate program offers instruction in basic web design using HTML and CSS. You will also learn to create web pages using Dreamweaver. Finally you will learn to publish polished photos using Photoshop.

ITSE 55032 Software Development Fundamentals 2 Credits
Prerequisite(s): Basic computer skills Note: Textbook required; flashdrive required. In this course you will first learn how a computer stores programs and data and how it makes decisions on that data. You will be introduced to programming constructs, object-oriented programming, and the Application Lifecycle Management. Included in this course is an introduction to web page, desktop applications and database programming. All of this material will prepare you to take the MTA Exam 98-361.

ITSE 55033 Object Oriented Design 6.4 Credits
Prerequisite(s): GAME 1303 This course is a study of large system analysis and design concepts from the object-oriented perspective. It includes determining required objects and their interfaces, and it also covers relationships between objects. (INEW 2340)
ITSE 55034  Camp Girl Programming Power  3.4 Credits
Note: For Girls in rising 6th, 7th, and 8th grades. The coding camp, Camp GP2 will introduce the campers to programming in a fun way using the Scratch language. This language will help define critical thinking skills by using coding blocks that represent programming structures used in programming languages used in industry.

ITSE 59014  Intro of Syst. Analysis & Desi  0.7-4 Credits
COMPUTER INFO TECH (ITSW)

ITSW 1307 Introduction to Database 3 Credits (2 Lec, 2 Lab)
This course is an introduction to database theory and the practical applications of a database. Students will plan, define, and design a database; design and generate tables, forms, and reports; and devise and process queries.
Course Type: Technical
Prerequisite(s): ITSW 1307 or department chair approval

ITSW 2334 Advanced Spreadsheets 3 Credits (2 Lec, 2 Lab)
This course includes advanced techniques for developing and modifying spreadsheets, including macros and data analysis functions. Topics covered include data entry, graphics, table building and searching, macro development, customized reports, database administration, and statistical analysis.
Prerequisite(s): ITSW 1307 or department chair approval

ITSW 2336 UNIX Operating Systems II 3 Credits
Course Type: Technical

ITSW 2337 Advanced Database 3 Credits (2 Lec, 2 Lab)
This course covers advanced concepts of database design and functionality. It is designed to provide an understanding of advanced functionality of databases, including physical representation, design criteria, and application implementation. A data control language is used in the implementation of database processing applications. Programs written will include report generation, multiple file management, relational database management, online screen generation, and menu driven systems.
Prerequisite(s): ITSW 1307 or department chair approval

ITSW 35047 MS Excel Intermediate 1.2 Credits
ITSW 39004 Basic Computer Liter for Srs 1.2 Credits
ITSW 39005 MS Enter Proj Manage Wksp 0.3 Credits
ITSW 41001 Introduction to Word Processin 4.8-11.2 Credits
ITSW 41002 Personal Scheduler/E-Mail Orga 0.7-4.8 Credits
ITSW 41003 Intro to Digital Imaging 0.7-4 Credits
ITSW 41004 Introduction to Spreadsheets 4.8-11.2 Credits
ITSW 41007 Introduction to Database 4.8-11.2 Credits
ITSW 41010 Introduction to Presentation G 4.8-11.2 Credits
ITSW 41013 Introduction to Data Entry 4.8-11.2 Credits
ITSW 41014 Data Entry I 0.7-3.2 Credits
ITSW 41015 Data Entry II 0.7-3.2 Credits
ITSW 41016 Data Entry III 0.7-3.2 Credits
ITSW 41017 Data Entry 3.2-9.6 Credits
ITSW 41021 Introduction to Integrated Pro 0.7-4 Credits
ITSW 41022 Introduction to Electronic Spr 0.7-3.2 Credits
ITSW 41023 Introduction to Computer Assis 0.7-3.2 Credits
ITSW 41030 E-Mail and Calendaring Softwar 0.7-3.6 Credits
ITSW 41033 Beginning Spreadsheets 0.7-4 Credits
ITSW 41037 Introduction to MS PowerPoint 0.7-4 Credits
ITSW 41041 Inter. Present. Graphics Soft. 0.7-2.4 Credits
ITSW 41045 Electronic Spreadsheets 3.2-9.6 Credits
ITSW 41046 Intermediate Electronic Spread 0.7-3.2 Credits
ITSW 41047 Intermediate Integrated Produc 0.7-3.2 Credits
ITSW 41050 Intermediate Computer Assisted 0.7-3.2 Credits
ITSW 41053 Introduction to Database/File 0.7-3.2 Credits
ITSW 41054 Database/File Management 3.2-9.6 Credits
ITSW 41055 Intermediate Database/File Man 0.7-3.2 Credits
ITSW 41058 Specialized Computer Applicati 0.7-4.8 Credits
ITSW 41091 Special Topics in Data Process 0.7-11.2 Credits
ITSW 41092 Special Topics in Management I 0.7-11.2 Credits
ITSW 42001 Fundamentals of Geographic Inf 4.8-11.2 Credits
ITSW 42029 Intermediate Spreadsheets II 0.8 Credits
ITSW 42031 Advanced Word Processing 4.8-11.2 Credits
ITSW 42034 Advanced Spreadsheets 4.8-11.2 Credits
ITSW 42037 Advanced Database 4.8-11.2 Credits
ITSW 42043 Advanced Data Entry 4.8-11.2 Credits
ITSW 42046 Integrated Productivity Progra 3.2-9.6 Credits
ITSW 42047 Adv Database/File Management 0.7-3.2 Credits
ITSW 42048 Advanced Integrated Productivi 0.7-3.2 Credits
ITSW 42049 Advanced Electronic Spreadshee 0.7-3.2 Credits
ITSW 42050 Computer Applications for Engi 3.2-4.8 Credits
ITSW 42052 Computer Assisted Business Gra 3.2-9.6 Credits
ITSW 42054 Advanced Computer Assisted Bus 0.7-3.2 Credits
ITSW 49001 CISCO .7 Credits
ITSW 55002 Excel - One Day 0.7 Credits
ITSW 55003  PowerPoint-One Day  0.7 Credits
Prerequisite(s): Basic computing skills Note: Textbook is required; flash drive is recommended. In this basic fast paced course, you will explore the PowerPoint environment and create a new presentation. You will format text on slides and add graphical objects, tables and charts to a presentation. Other topics include adding bullet lists, transitions, slide show delivery and printing.

ITSW 55004  Access - One Day  0.7 Credits
Prerequisite(s): Basic computer skills Note: Textbook is required; flash drive is recommended. In this basic course, you will use Microsoft Access 2013 to design a simple database, build a new database with related tables, manage data in a table, query a database using different methods, design forms and generate reports.

ITSW 55006  Excel - Intermediate Skills  1.6 Credits
Prerequisite(s): Excel Basic Skills or equivalent knowledge Note: Textbook is required; flash drive is recommended. This course teaches more advanced tools for analysis and presentation of complex, realistic data in Microsoft Excel. These skills include how to manage complex workbooks, build more complex functions, use data analysis tools, make an impact with powerful chart and presentation features, and collaborate with other users. Students will benefit most from this course if they want to use Excel 2016 to perform real-world tasks such as rearranging and presenting complex data; using names in formulas, sorting and filtering tables, consolidating data, and creating, formatting and manipulating PivotTables.

ITSW 55007  Access-Intermediate  0.8 Credits
Advanced concepts of relational database management, hierarchical models, network models, relational models, table merging, relational capabilities, report generation, security features, data file transfer, graphics support, and macro commands.

ITSW 55008  Access-Basic Skills  2.4 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge Note: Textbook required; flash drive recommended. In this course, you will work with Access, a powerful database application to store and retrieve data. You will begin with learning basic database terminology. You will learn the objects used in Access, how to construct tables, use forms to display data, create queries to select data and to format reports for data that is retrieved from the database. You will use the wizards to create different objects. You will learn relationships between tables, primary keys, date formats, and you will be able to link tables to create queries. Begin to acquire skills and knowledge to pass the optional MOS exam in Access.

ITSW 55009  Visio Pro - Basic Skills  1.6 Credits
Visually communicate information clearly, concisely, and effectively in ways that text and numbers cannot using Microsoft Visio Pro 2007. Learn to create business and technical diagrams that document and organize complex ideas, processes, and systems.

ITSW 55010  Excel - Basic Skills  1.6 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge Note: Textbook is required; flash drive is recommended. This course teaches the basic concepts and skills students need to start being productive with Microsoft Excel - how to create, save, share, and print worksheets that contain various kinds of calculations and formatting. Students will benefit most from this course if they want to accomplish basic workplace tasks in Excel such as creating worksheets, formatting the data and the spreadsheet; manipulating data; creating charts and printing worksheets.

ITSW 55011  Excel - Advanced Skills  1.6 Credits
Prerequisite(s): Excel - Intermediate Skills. Note: Textbook required; flash drive recommended. This course teaches advanced tools for solving real-world problems using lookup and decision-making functions, auditing and error-handling, array functions, date and text functions, importing and exporting, using Power Pivot and the Power Pivot Data Model, what-if-analysis, and macros. Students will benefit most from this course if they want to use Excel to perform real-world tasks such as handling and getting information from large amounts of data from sources inside out and outside of Excel, creating output that varies according to conditions, manipulating dates and text, and automating repetitive tasks.

ITSW 55012  Access-Advanced Skills  2.4 Credits
In this course, you will work with Access 2010, a powerful database application to store and retrieve data. You will begin with very brief review of the basic concepts. Then you will learn about advanced tables, relationships between tables, field data types, lookup fields, default values and advanced query techniques. You will be creating custom forms, resizing, inserting sub forms and adding calculations to a form. You will use templates, create macros, import external data, and publish database objects as PDF or XPS files. Acquire skills and knowledge to pass the optional MOS Core exam in Access.

ITSW 55013  PowerPoint-Basic Skills  1.6 Credits
Explore the fundamentals of Microsoft PowerPoint 2010. Learn to create, run, and print presentations for home or office use. Get creative by inserting new slides, applying slide transitions, and sound effects. Add that personal touch, using color schemes, pictures, and animation.

ITSW 55014  Outlook - Basic Skills  1.6 Credits
Explore the fundamentals of Microsoft Outlook 2010 for use at home or at the office. Learn to create new messages, schedule appointments and tasks, manage messages, create and manage contacts, and create and manage tasks and notes. Communicate and coordinate your schedule with family, friends and colleagues.

ITSW 55016  Photoshop - Basic Skills  3.2 Credits
An introduction to digital imaging on the computer using Adobe Photoshop. Get creative with your photos at home or at your business. Learn to apply color techniques and add type to an image, use layers, channels, and paths; create special effects with filters, and much more.

ITSW 55017  AutoPLANT 3D Piping  1.6 Credits
This course teaches new users the fundamentals of Bentley AutoPLANT 3D Piping, Equipment, Isometrics, and EXPLORER/ID programs in a 3D environment. You will execute a simulated 3D design project by building equipment and routing the piping systems. Orthographic plans, sections and bills-of-material will be generated from the models. You will learn how to extract piping isometrics and stress analysis models using AutoPLANT Translation utilities, Auto-Iso, and Alias’ ISOGEN program. You will also learn to draw 2D isometrics using the AutoPLANT 3D Isometrics application. You will be shown how to navigate through the model, perform interference detection, generate reports and produce 2D orthographic and isometric drawings.

ITAL 55018  PowerPoint-Intermediate Skills  0.8 Credits
Create and modify multimedia presentations complete with slides, charts, and special effects.
ITSW 55020 Adobe Illustrator 3.2 Credits
Adobe Illustrator allows you to create artwork that you can use for web pages or any print or electronic media. This course will give students a good overview of the tools and features of Illustrator. Students will create artwork using the various tools including the pencil and pen tools. Students will learn the various ways to apply color to their artwork. Students will work with layers, the 3D effects, and symbols. Students will need to have a copy of Illustrator.

ITSW 55021 Adobe Photoshop I for Photographers 3.2 Credits
Prerequisite(s): Introductory Professional Photography, Intermediate Professional Photography, Portrait Photography, Windows for the Desktop or equivalent knowledge. This course for Portrait/Wedding Photographers provides hands-on experience and systematic instructions on how to use Adobe Photoshop to enhance images. Students will develop techniques to update and change images proficiently. This course will cover selection of file formats, resolution for printing output and web use, logo creation, photograph combination, adding colorizing to BW photographs and applying text.

ITSW 55022 Visio-Beginner 0.8 Credits
Instruction in accepting input from digitizer, light pens, and mouse interface; data file transfer; reading ASCII and DIF files; line, scatter, bar, and three dimensional graphs; pie charts.

ITSW 55023 Excel-Advanced 0.8 Credits
Use Excel 2007 analysis tools to create pivot tables and PivotTable reports. Perform what-if analysis; record and run macros. Learn to audit and authenticate workbooks. Use XML to share data. Acquire skills and knowledge necessary to pass the optional MCAS Certification exam in Excel.

ITSW 55024 Advanced Database-MS Access 6.4 Credits
This course develops a mastery of database design and functionality. It is designed to provide an understanding of advanced functionality of databases, including physical representation, design criteria, and application implementation. A data control language is used in the implementation of database processing applications. Programs written will include report generation, multiple file management, relational database management, online screen generation and menu driven systems. (ITSW 2336)

ITSW 55025 InTools for Users 3.6 Credits

ITSW 55026 Excel: One Day-Intermediate 0.7 Credits
Prerequisite(s): Excel One Day or equivalent knowledge Note: Textbook is required; flash drive is recommended. In the first course in this series, Excel - One Day, students gained all the basic skills needed to create, edit, format and print basic spreadsheets. This continuation provides the next step: to apply conditional formatting and manage multiple sheet workbooks. In this fast-paced course, students will use Microsoft Office Excel to enhance spreadsheets with templates, charts, graphics and advanced formulas.

ITSW 55027 PowerPoint: One Day-Intermediate 0.7 Credits
This class should be taken as a follow-up to PowerPoint- One Day training. This course provides users with an enhanced understanding and skill base in Microsoft Office PowerPoint. By the end of the course, participants should be able to use more advanced PowerPoint tools and applications, including enhancements and features that will transform basic presentations into those with an added and more powerful means of communication.

ITSW 55029 MATLAB, Simulink, Stateflow 4 Credits
This hands-on course provides a working introduction to the MATLAB technical computing environment and includes simulink for system and algorithm modeling as well as stateflow for logic driven system modeling.

ITSW 55032 Visio Pro Intermediate One Day 0.7 Credits
In this continuation to Visio Pro: One Day, the student will expand on the knowledge and skill using Visio Pro. The student will work with many advanced features, including using the drawing tools, creating and working with custom stencils and templates, and sharing Visio drawings with other applications.

ITSW 55035 Excel I-Technical 0.8 Credits
This course is intended for persons with a basic understanding of Microsoft Windows who need to gain the skills necessary to create, edit, format, and print basic Microsoft® Excel 2003 worksheets. This course will provide the participant with the basic concepts to create and edit basic Microsoft® Office Excel 2003 worksheets and workbooks.

ITAL 55040 Excel-Intermediate 0.8 Credits

ITAL 55041 Advanced PowerPoint 0.8 Credits
Created for Aerospace Academy class.

ITAL 55042 MATLAB Fundamentals & Programming Techniques 0.8 Credits

ITAL 55043 Advanced MATLAB Programming Techniques 0.8 Credits

ITAL 55044 Building MATLAB GUIs 0.8 Credits

ITAL 55045 Statistical Methods in MATLAB 0.8 Credits

ITAL 55053 Outlook - One Day 0.7 Credits
Prerequisite(s): Windows for the desktop or equivalent knowledge; Type 20 wpm. Note: Textbook required, flash drive recommended. Learn to create new messages, schedule appointments and tasks, manage messages, create and manage contacts, and create and manage tasks and notes. Communicate and coordinate your schedule with family, friends and colleagues.

ITAL 55054 MATLAB Fundamentals & Programming Techniques 16 1.6 Credits

ITAL 55057 MOS Prep - Excel 0.8 Credits
This course is an exam preparatory course for the Microsoft Office Specialist Certification exam in Excel. You will use practice test software that simulates the real test and testing environment. The price of the course includes the testing fee.

ITAL 55058 Visio Pro Advanced 1.6 Credits
This course is designed to help you become proficient in creating technical layouts, advanced custom shape designs, various business diagrams, detailed network diagrams, Web site maps, and integrating Visio with other applications.

ITAL 55062 Photoshop I 2.4 Credits
Prerequisite(s): Website Design Note: Textbook required; flash drive required. Use Adobe Photoshop to enhance your digital images for web page creations. Learn to apply color techniques and add type to an image, use layers, channels, and paths; create special effects with filters.

ITAL 55063 Access Intermediate 1.4 Credits
In this course, you will review basic database concepts, how to create and modify databases and their various objects using the Microsoft® Office Access relational database application. You will review databases, including creating and working with Access tables, relationships, queries, forms, and reports. Then you will learn how to maintain data consistency, how to customize database components, and how to share Access data with other applications.
ITSW 55065  Excel One Day-Advanced  0.7 Credits
Prerequisite(s): Excel One Day Intermediate or equivalent knowledge
Note: Textbook required; flash drive required In this course, you will extend your knowledge into some of the more specialized and advanced capabilities of Excel by automating some common tasks, applying advanced analysis techniques to more complex data sets, collaborating on worksheets with others, and sharing Excel data with other applications.

ITSW 55069  Introduction to Database  6.4 Credits
Prerequisite(s): ITSC 1309 or department chair approval. Note: Textbook required. This course is an introduction to database theory and the practical applications of a database. Students will plan, define and design a database; design and generate tables, forms and reports; and devise and process queries. (ITSW 1307)

ITSW 55071  ST:Excel Basic Skills Complete  4.8 Credits

ITSW 55072  Excel Intermediate Skills Customized  2.4 Credits
Learn to move and copy content cells, sort mathematical, statistical, and financial functions. Learn date and time arithmetic, report generation; and built in graphic support.

ITSW 55075  Engineering Systems Modeling with Excel/VBA  1.6 Credits
Engineering Analysis and Automation using Excel and VBA is a hands-on courses that instruct participants in the use of spreadsheets to perform common and repetitive engineering tasks.

ITSW 55076  MATLAB Fundamentals and Aerospace Applications  1.6 Credits
MATLAB Programming Techniques provides hands-on experience using the features in the MATLAB language to write efficient, robust, and well organized code. These concepts form the foundation for writing full applications, developing algorithms, and extending product capabilities. Details of performance optimization are covered throughout the course, as well as tools for writing, debugging, and profiling code. Topics Include: Programming for correctness; Structuring data; Structuring code; Classes and objects. 1 day course.

ITSW 55077  MOS Prep - Access  0.8 Credits
This course is an exam preparatory course for the Microsoft Office Specialist Certification exam in Access. You will use practice test software that simulates the real test and testing environment. The price of the course includes the testing fee.

ITSW 55078  MOS Prep - Word  0.8 Credits
This course is an exam preparatory course for the Microsoft Office Specialist Certification exam in Word. You will use practice test software that simulates the real test and testing environment. The price of the course includes the testing fee.

ITSW 55080  Outlook - Advanced Skills  0.8 Credits
Build upon your basic Microsoft Outlook skills. Learn to modify contacts, invite attendees to meetings, create notes and journal entries, print calendars and contact lists, assign tasks to others, and much more. Become an expert user of this powerful software.

ITSW 55081  Outlook-Basic & Skillbuilding  2.4 Credits
Build your job skills while learning the basics of Microsoft Outlook.

ITSW 55082  ST: Access - One Day  0.8 Credits
In this basic course, you will use Microsoft Access 2007 to design a simple database, build a new database with related tables, manage data in a table, query a database using different methods, design forms and generate reports.

ITSW 55083  ST: Access - One Day - Advanced  0.8 Credits
In this course, you will extend your knowledge into some of the more specialized and advanced capabilities of Access by structuring existing data, writing advanced queries, working with macros, enhancing forms and reports, and maintaining a database.

ITSW 55084  ST: Access - One Day - Intermediate  0.8 Credits
In the first course in this series, Access: One Day, participants gained all the basic skills needed to work Access tables, relationships, queries, forms, and reports. In this intermediate level course participants will consider how to design and create a new Access database, how to customize database components, and how to share Access data with other applications.

ITSW 55085  ST: Excel - One Day  0.8 Credits
In this course you will create and edit basic Microsoft Excel worksheets and workbooks. You will learn to create basic formulas and perform basic calculations.

ITSW 55086  ST: Excel - One Day - Advanced  0.8 Credits
In this course, you will extend your knowledge into some of the more specialized and advanced capabilities of Excel by automating some common tasks, applying advanced analysis techniques to more complex data sets, collaborating on worksheets with others, and sharing Excel data with other applications.

ITSW 55087  ST: Excel - One Day - Intermediate  0.8 Credits
In the first course in this series, Excel- One Day, students gained all the basic skills needed to create, edit, format, and print basic spreadsheets. This continuation provides the next step: to streamline repetitive tasks and display spreadsheet data in more visually effective ways. In this course, students will use Microsoft Office Excel to streamline and enhance spreadsheets with templates, charts, graphics, and formulas.

ITSW 55088  ST: PowerPoint One Day  0.8 Credits
In this basic fast paced course, you will explore the PowerPoint 2007 environment and create a new presentation. You will format text on slides and add graphical objects, tables and charts to a presentation.

ITSW 55089  MOS Word  4 Credits
Prerequisite(s): Windows for the desktop or equivalent knowledge. Type 20 wpm. Note: Textbook required, flash drive recommended MOS Word teaches the information worker how to work with different types of documents using a variety of core and intermediate features to create and format business documents such as letters, forms, newsletters, memos and proposals. As you begin to build your skills, you will then create a variety of flyers and other promotional materials as well as explore different ways to share the information with internal and external customers. These are all skills needed to successfully complete the MOS Word Certification Core Exam.

ITSW 55090  MOS Excel  4 Credits
Prerequisite(s): Excel Basic Skills or equivalent knowledge and type 20 words per minute Note: Textbook is required; flash drive is recommended. MOS Excel teaches the information worker how to work with different types of documents using a variety of core and intermediate features to create and edit professional-looking spreadsheets for a variety of purposes and situations. You will learn to construct cell data, format worksheets, work with charts and graphics. This course teaches the skills you will need to successfully complete the MOS Excel Certification Core exam.
ITSW 55091  MOS Access  4 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge and type 20 wpm Note: Textbook required, flash drive recommended MOS Access teaches the information worker how to work with different types of documents using a variety of core and intermediate features to create and edit professional databases for a variety of purposes and situations. You will learn to create and modify database tables. You will learn to create and modify forms, queries and reports.

ITSW 55092  MOS PowerPoint  2.4 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge; Type 20 wpm. Note: Textbook required, flash drive recommended. MOS PowerPoint teaches the information worker how to create and manage presentations using a variety of core and advanced features. You will use PowerPoint to create and edit professional-looking presentations for a variety of purposes and situations, as well as explore different ways to share the information with internal and external customers. You will learn to work with text, illustrations, media, charts and tables. In this course you will have reviewed all of the exam objectives necessary to prepare for Microsoft PowerPoint Core Exam.

ITSW 55093  MOS Outlook  2.4 Credits
MOS Outlook teaches you how Outlook is structured, and how to use the various modules to coordinate communications and collaborations with others. Modules covered in this course include Mail, Calendar, Contacts, Tasks, and Notes. Also included are some features commonly used for collaboration purposes such as creating distribution lists or groups, cleaning up your system, marking junk mail, and how to check the size of your Outlook data file. In this course you will review all of the exam objectives necessary to prepare for Microsoft Outlook 2010 Core Exam.

ITSW 55094  Excel Basic Customized for Medical Practices  0.8 Credits
Prerequisite(s): None This course introduces Microsoft Excel customized for medical office applications. At the conclusion of the training, trainees will be able to: prepare and format Excel worksheets; insert formulas and learn cell referencing; move and link data between worksheets with a 3D reference; and learn to maintain workbooks. Note: Materials provided.

ITSW 55098  Advanced Spreadsheets  6.4 Credits
Prerequisite(s): Introduction to Database This course covers the advanced techniques for developing and modifying spreadsheets. Including macros and data analysis functions. The topics covered include data entry, graphics, table building, and searching, macro development, customized reports, database administration, and statistical analysis. (ITSW 2334) Note: Textbook and flashdrive required.

ITSW 55099  Access Introductory Skills  1.6 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge Note: Textbook required; flash drive recommended In this course, you will work with Access 2010, a powerful database application to store and retrieve data. You will begin with learning basic database terminology. You will learn the objects used in Access, how to construct tables, use forms to display data, create queries to select data and to format reports for data that is retrieved from the database. You will use the wizards to create different objects. You will learn relationships between tables, primary keys, date formats, and you will be able to link tables to create queries.

ITSW 55101  Excel Basic Skills-Cenikor  1.6 Credits
Prerequisite(s): None. In this course, you will receive an overview of Windows file management and MS office 2010. You will work with Excel 2010, a powerful spreadsheet application to learn to prepare and format worksheets. You will learn how to insert texts and formulas into cells. You will use simple functions. You will construct charts for your data. You will learn formatting and printing of selected ranges. You will learn to create workbooks and move data between workbooks.

ITSW 55102  Excel Complete  4.8 Credits
Note: Textbook is required. This course provides the concepts and skills to be productive with Microsoft Excel starting with fundamentals and working up to advanced tools and techniques. This course maps to the objectives of the Microsoft Office Specialist and Expert exams for Excel. You will benefit most from this course if you want to use Excel to perform real-world tasks, from common workplace tasks to complex operations with large amounts of data. The course assumes students know how to use a computer, and that they're familiar with Microsoft Windows. It does not assume that they've used a different version of Excel or another spreadsheet program before.

ITSW 59000  Intermediate MS Access  2.4 Credits
ITSW 59003  Access - Introduction (Net)  2.4 Credits
ITSW 59004  Access - Intermediate (Net)  2.4 Credits
ITSW 59018  Excel - Introduccion (Net)  2.4 Credits
**COMPUTER INFO TECH (ITSY)**

**ITSY 1342 Information Technology Security 3 Credits (2 Lec, 2 Lab)**
Instruction is provided in security for network hardware, software, and data including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Prerequisite(s): ITNW 1325 or ITCC 1314 or department chair approval. Course Type: Technical

**ITSY 2300 Operating System Security 3 Credits (2 Lec, 2 Lab)**
This course covers the safeguarding of computer systems by demonstrating server support skills and designing and implementing a security system. Students will identify security threats and monitor network security implementations, and use best practices to configure operating systems to industry security standards. Course Type: Technical

**ITSY 2301 Firewalls and Network Security 3 Credits (2 Lec, 2 Lab)**
Students will identify elements of firewall design, types of security threats and responses to security attacks using best practices to design, implement, and monitor a network security plan, as well as perform security incident postmortem reporting and ongoing network security activities. Course Type: Technical

**ITSY 2341 Security Management Practices 3 Credits (2 Lec, 2 Lab)**
This course provides in-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan. Course Type: Technical

**ITSY 2342 Incident Response and Handling 3 Credits (2 Lec, 2 Lab)**
This course presents an in-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures. Course Type: Technical

**ITSY 2343 Computer System Forensics 3 Credits (2 Lec, 2 Lab)**
This course provides an in-depth study of system forensics including methodologies used for analysis of computer security breaches. It also includes gathering and evaluating evidence to perform postmortem analysis of a security breach. Prerequisite(s): ITSY 1342 and ITSY 2301 or department chair approval. Course Type: Technical

**ITSY 2345 Network Defense and Countermeasures 3 Credits (2 Lec, 2 Lab)**
This is a practical application and comprehensive course that includes the planning, design, and construction of a complex network that will sustain an attack, document events, and mitigate the effects of the attack. This is a capstone course. Course Type: Technical

**ITSY 2359 Security Assessment and Auditing 3 Credits (2 Lec, 2 Lab)**
This course is the capstone experience for the security curriculum. It synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems to ensure appropriate levels of protection are in place to assure regulatory compliance. Course Type: Technical

**ITSY 55002 Security + Boot Camp 4.8 Credits**
Note: Textbook is required. Use your existing A+ computer skills knowledge and IT experience to learn the fundamentals of implementing basic security services on all types of computer networks. Acquire knowledge needed to pass the CompTIA Security+ exam. This knowledge includes system security, network infrastructure, access control, assessments and audits, cryptography and organizational security across all vendor products. Course Type: Technical

**ITSY 55003 Security + 4.8 Credits**
Prerequisite(s): Networking and administrative skills in Windows based TCP/IP networks. A+ and Network+ strongly recommended. This course is targeted toward an Information Technology (IT) professional who has networking and administrative skills in Windows-based TCP/IP networks and familiarity with different operating systems and who wants to further a career in IT by acquiring a foundational knowledge of security topics; prepare for the CompTIA Security+ Certification examination; or use Security+ as the foundation for advanced security certifications or career roles, especially in cyber security. Course Type: Technical

**ITSY 55004 Security Fundamentals 2 Credits**
Prerequisite(s): Basic computer skills Note: Textbook required, flash drive required. Learn the vital fundamentals of security such as understanding security layers, authentication, authorization, and accounting. Become familiar with security policies, network security and protecting the server and client. Course Type: Technical

**ITSY 55005 Information Technology Security 6.4 Credits**
Prerequisite(s): Fundamentals of Networking or Cisco Expl1 NW Fundamentals. Note: Textbook required; flash drive required. This course provides instruction in security for network hardware, software, and data, including physical security; backup procedures; relevant tools, encryption; and protection from viruses. (ITSY 1342) Course Type: Technical

**ITSY 55006 Operating System Security 6.4 Credits**
Prerequisite(s): ITSY 1342. Note: Textbook required, flash drive required. This course provides instruction in safeguarding computer operating systems by demonstrating server support skills and designing and implementing a security system. The student is taught to identify security threats, monitor network security implementations, and use best practices to configure operating systems to industry security standards. (ITSY 2300)

**ITSY 55007 Incident Response & Handling 6.4 Credits**
Prerequisite(s): ITSY 2300 and ITSY 2301 Note: Textbook required This course provides in-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures. (ITSY 2342)
ITSY 55008 Security Assessment & Auditing 6.4 Credits
Prerequisite(s): None  Note: Textbook required  This course is the capstone experience for the security curriculum. It synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security system to ensure appropriate levels of protection are in place. (ITSY 2359)

ITSY 55009 Ethical Hacking and Penetration Testing 4 Credits
Learn to protect yourself and your company against hackers, by learning their tools and techniques, and then testing your network to see if it is secure. This course is heavily focused on the techniques used by attackers to penetrate networks. You will learn the step-by-step process that hackers use to assess corporate networks, and what physical, logical, and administrative controls can be used to prevent their attacks.
COMPUTER SCIENCE (COSC)

COSC 1336  Programming Fundamentals I  3 Credits  (2 Lec, 2 Lab)
This course introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. This course is included in the Field of Study Curriculum for Computer Science.
Prerequisite(s): Reading level 7
Course Type: Academic

COSC 1337  Programming Fundamentals II  3 Credits  (2 Lec, 2 Lab)
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.)
Course Type: Academic

COSC 2325  Computer Organization  3 Credits  (2 Lec, 2 Lab)
The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. This course is included in the Field of Study Curriculum for Computer Science. Algebra level competency is suggested to succeed in this class.
Prerequisite(s): COSC 1336 and COSC 1337 or department chair approval
Course Type: Academic

COSC 2336  Programming Fundamentals III  3 Credits  (2 Lec, 2 Lab)
This course explores further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), searching, sorting, recursion, and algorithmic analysis. Programs will be implemented in an appropriate object oriented language. (This course is included in the Field of Study Curriculum for Computer Science.)
Prerequisite(s): COSC 1337 or department chair approval
Course Type: Academic

COSC 39002  Program fundamental L/w1336  4.8 Credits
CONSTRUCTION TECHNOLOGY (CNBT)

**CNBT 1210 Basic Construction Safety 2 Credits (2 Lec, 0 Lab)**
This course provides an introduction to basic job site construction safety in residential, commercial, and industrial construction. This course is equivalent to courses by the Occupational Safety and Health Administration of thirty (30) hours of training.
Course Type: Technical

**CNBT 1311 Construction Methods & Materials I 3 Credits (3 Lec, 0 Lab)**
This course provides an introduction to construction materials and methods and their applications including an introduction to green materials and methods.
Course Type: Technical

**CNBT 1315 Field Engineering I 3 Credits (2 Lec, 2 Lab)**
This course will focus on surveying equipment, sketches, proper field note taking, methods of staking, layout of building sites, and horizontal and vertical controls at a construction site.
Course Type: Technical

**CNBT 1442 Building Codes and Inspections 4 Credits (4 Lec, 0 Lab)**
This course is a study of building codes, standards applicable to building construction, and inspection processes.
Course Type: Technical

**CNBT 1446 Construction Estimating I 4 Credits (3 Lec, 3 Lab)**
This course is a study of fundamentals of estimating materials and labor costs in construction.
Course Type: Technical

**CNBT 2310 Commercial/Industrial Blueprint Reading 3 Credits (2 Lec, 4 Lab)**
This course provides an introduction to blueprint reading for commercial/industrial construction. Topics of study will include architectural and engineering scales, blueprint symbols and abbreviations, interpreting a set of commercial/industrial construction contract documents, and correlation of elevations, selections, details, plan views, schedules, and general notes.
Course Type: Technical

**CNBT 2315 Construction Specifications and Contracts 3 Credits (3 Lec, 0 Lab)**
This course is a study of the legal aspects of written construction documents.
Course Type: Technical

**CNBT 2342 Construction Management I 3 Credits (3 Lec, 0 Lab)**
This course is a study of management skills on the job site. Topics of study will include written and oral communications, leadership and motivation, problem solving, and decision making.
Course Type: Technical

**CNBT 2344 Construction Management II 3 Credits (3 Lec, 0 Lab)**
This course is a management course in contract documents, safety, planning, scheduling, production control, and law and labor issues. Topics of study include contracts, planning, cost and production peripheral documents, and costs and work analysis.
Course Type: Technical

**CNBT 2366 Practicum-Construction Technology 3 Credits (0 Lec, 21 Lab)**
This course is a practical, general workplace training supported by an individual learning plan developed by the employer, college, and student. Direct supervision is provided by a faculty member or worker supervisor. A practicum may be a paid or unpaid learning experience. The job description for the worksite must relate to the general curriculum of the Construction Management program.
Prerequisite(s): CNBT 2310 or department chair approval
Course Type: Technical

**CNBT 2435 Computer-Aided Construction Scheduling 4 Credits (3 Lec, 3 Lab)**
This course provides a study of advanced construction scheduling utilizing computer scheduling software to perform various scheduling procedures.
Course Type: Technical

**CNBT 2440 Mechanical, Plumbing and Electrical Systems in Construction II 4 Credits (3 Lec, 2 Lab)**
This course is a study of the processes and methods used in design, selection of equipment, and installation of mechanical, plumbing, and electrical systems in commercial buildings. Topics of study will include heating and cooling systems, duct work, mechanical and electrical control systems, lighting requirements, and design of water supply and sanitary sewer systems including methods and materials used in buildings to conserve water, electricity, and natural gas.
Course Type: Technical
CNBT 41001 Introduction to Construction  3.2-9.6 Credits
CNBT 41002 Mechanical, Plumbing, and Elec  4.8-9.6 Credits
CNBT 41005 Residential and Light Commerci  4.8-9.6 Credits
CNBT 41007 Commercial and Industrial Blue  4.8-9.6 Credits
CNBT 41011 Construction Methods and Mater  4.8-9.6 Credits
CNBT 41013 Concrete - Residential  4.8-12.8 Credits
CNBT 41016 Construction Technology I  6.4-17.6 Credits
CNBT 41017 Introduction to Residential an  4.8-9.6 Credits
CNBT 41042 Building Codes and Inspections  4.8-9.6 Credits
CNBT 41044 Construction Materials Testing  4.8-9.6 Credits
CNBT 41046 Construction Estimating I  4.8-9.6 Credits
CNBT 41049 Concrete - Commercial and Indu  6.4-17.6 Credits
CNBT 41050 Construction Technology II  6.4-17.6 Credits
CNBT 41053 Construction Technology III  6.4-17.6 Credits
CNBT 41091 Special Topics in Construction  0.7-11.2 Credits
CNBT 42004 Construction Materials, Method  4.8-9.6 Credits
CNBT 42015 Legal Responsibilities and Spe  4.8-9.6 Credits
CNBT 42018 Construction Tools and Techniq  4.8-9.6 Credits
CNBT 42032 Project Scheduling  4.8-9.6 Credits
CNBT 42035 Computer-Aided Construction Sc  4.8-9.6 Credits
CNBT 42037 Construction Estimating II  4.8-9.6 Credits
CNBT 42039 Construction Technology IV  6.4-17.6 Credits
CNBT 42040 Mechanical, Electrical, and Pl  4.8-9.6 Credits
CNBT 42042 Construction Management I  4.8-12.8 Credits
CNBT 42044 Construction Management II  4.8-12.8 Credits
CNBT 42046 Construction Management III  4.8-12.8 Credits
CNBT 55000 Basic Construction Safety  3.2 Credits
Basic job construction safety in residential, commercial, and industrial construction. (CNBT 1210)

CNBT 55001 Commercial/Industrial Blueprint Reading  9.6 Credits
Introductory blueprint reading for commercial/industrial construction. (CNBT 2310)

CNBT 55002 Construction Management I  4.8 Credits
Management skills on the job site with topics including leadership and motivation, problem solving, and decision moving. (CNBT 2042)

CNBT 55003 Construction Methods and Materials I  4.8 Credits
Introduction to construction materials and methods and their applications. (CNBT 1311)

CNBT 55004 Building Codes and Inspections  6.4 Credits
Learn to identify various construction classifications and occupancy categories; cross-reference the guidelines, tables, charts, and specifications as presented in the building codes; and determine if construction meets building codes. (CNBT 1442)

CNBT 55005 Construction Estimating I  9.6 Credits
Learn to explain estimating procedures; estimate materials from blueprints; estimate cost of waste removable and recycling related to sustainable construction processes; and calculate labor units and costs. (CNBT 2317)

CNBT 55006 Construction Specifications and Contracts  4.8 Credits
Learn the purpose of construction specifications; describe the Construction Specifications Institute (CSI) divisions in contract documents; and identify the typical legal documents required for construction. Identify the typical legal documents required by sustainable rating systems. (CNBT 2315)

CNBT 55007 Green Building  6.4 Credits
Learn to explain the concept of green building; and identify materials to build exterior and interior systems that reflect sustainable building concepts. Explore smart energy technologies and their effects on energy usage. (CNBT 2317)

CNBT 55008 Field Engineering I  6.4 Credits
This course will focus on surveying equipment, sketches, proper field note taking, methods of staking, layout of building sites, and horizontal and vertical controls at a construction site. (CNBT 1315)

CNBT 55009 NCCER Project Supervision  8 Credits
Prerequisite(s): NCCER Certified Plus or employer permission. A management course in contract documents, safety, planning, scheduling, production control, law and labor issues. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis. Project supervisors plan, coordinate and insure that projects are completed safely, under budget and on-time. This course focuses on these principles of project supervision and further includes tools to manage human resources, oversee all activities related to building materials for the project and quality control.
COSMETOLOGY (CSME)

CSME 1248 Principles of Skin Care 2 Credits
This course is an introduction of the theory and practice of skin care. Courses taken in level sequence order or department chair approval. 80 contact hours per semester. 2-1-4
Course Type: Technical

CSME 1302 Applications of Facial and Skin Care Technology I 3 Credits (2 Lec, 3 Lab)
This is an introduction to the application of facial and skin care technology. Includes identifying and utilizing professional skin care products.
Co-requisite(s): CSME 1409 and 1507 or department chair approval. 80 contact hours per semester.
Course Type: Technical

CSME 1308 Principles of Eyelash Extensions 3 Credits (1 Lec, 4 Lab)
This course provides the student with the practical skills necessary to safely and effectively apply eyelash extensions.
Co-requisite(s): CSME 1409 and 1507 or department chair approval. 80 contact hours per semester.
Course Type: Technical

CSME 1310 Introduction to Haircutting and Related Theory 3 Credits (1 Lec, 6 Lab)
This course is an introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning, and finishing techniques. Courses taken in level sequence order or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 1330 Orientation to Nail Technology 3 Credits (1 Lec, 8 Lab)
This course is an overview of the fundamental skills and knowledge necessary for the field of nail technology. Courses taken in level sequence order or department chair approval. 144 contact hours per semester.
Course Type: Technical

CSME 1354 Artistry of Hair Design I 3 Credits (1 Lec, 6 Lab)
This course is an introduction to hair design. Topics include the theory and applications of wet styling, braiding, thermal hair styling and finishing techniques. Courses taken in level sequence order or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 1355 Artistry of Hair Design II 3 Credits (1 Lec, 6 Lab)
This is a continuation of hair design. Topics include additional theory and applications of current trends in hair design. Courses taken in level sequence order or department chair approval (Students may not receive credit for CSME 1355 if they have previously earned credit for COSM 1322, COSM 1322 or CSME 1251.) 112 contact hours per semester.
Course Type: Technical

CSME 1409 Application of Eyelash Extensions 4 Credits (2 Lec, 4 Lab)
This course provides the student with the skills necessary to perform client services using current techniques and business practices.
Co-requisite(s): CSME 1308 and 1507 or department chair approval. 96 contact hours per semester.
Course Type: Technical

CSME 1421 Principles of Facial and Skin Care Technology I 4 Credits (2 Lec, 6 Lab)
This is an introduction to the principles of facial and skin care technology. Topics include anatomy, physiology, theory, and related skills of facial and skin care technology. Co-requisites CSME 1520, CSME 1302 and courses taken in level sequence order or department chair approval. 128 contact hours per semester.
Course Type: Technical

CSME 1435 Orientation to the Instruction of Cosmetology 4 Credits (2 Lec, 5 Lab)
This course is an overview of skills and knowledge necessary for the instruction of cosmetology students.
Co-requisite(s): CSME 1534, and valid Texas Department of Licensing and Regulations License, high school diploma or GED or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 1457 Applications of Hair-Weaving and Braiding 4 Credits (2 Lec, 7 Lab)
This course is an emphasis on the application of hair weaving and braiding techniques and preparation for the State Licensing Agency examination.
Co-requisite(s): CSME 1552. 144 contact hours
Course Type: Technical

CSME 1501 Orientation to Cosmetology 5 Credits (3 Lec, 8 Lab)
This course is an overview of the skills and knowledge necessary for the field of cosmetology. Courses taken in level sequence order or department chair approval. 176 contact hours per semester.
Course Type: Technical

CSME 1505 Fundamentals of Cosmetology 5 Credits (3 Lec, 4 Lab)
This is a course in the basic fundamentals of cosmetology. Topics include safety and sanitation, service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, and comb out. Courses taken in level sequence order or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 1507 Orientation to Eyelash Extensions 5 Credits (3 Lec, 6 Lab)
This course is an overview of the skills and knowledge necessary for the field of eyelash extensions. Topics include the basic knowledge of chemistry, eyelash growth cycles, proper selection and application, supplies and equipment of the industry, safety, sanitation, laws and rules of the state licensing agency as they relate to eyelash extensions.
Co-requisite(s): CSME 1308 and 1409 or department chair approval. 144 contact hours per semester.
Course Type: Technical

CSME 1520 Orientation to Facial Specialist 5 Credits (3 Lec, 8 Lab)
This course is an overview of the skills and knowledge necessary for the field of facials and skin care.
Co-requisite(s): CSME 1421, CSME 1302 or department chair approval. 176 contact hours per semester.
Course Type: Technical
CSME 1531  Principles of Nail Technology I  5 Credits  (3 Lec, 8 Lab)
This is a course in the principles of nail technology. Topics include anatomy, physiology, theory, and related skills of nail technology. 176 contact hours per semester.
Course Type: Technical

CSME 1534  Cosmetology Instructor I  5 Credits  (3 Lec, 6 Lab)
This course covers the fundamentals of instructing cosmetology students.
Co-requisite(s): CSME 1435 or department chair approval. A valid Texas Department of Licensing and Regulation license and high school diploma or GED. 144 contact hours per semester.
Course Type: Technical

CSME 1541  Principles of Nail Technology II  5 Credits  (3 Lec, 8 Lab)
This course is a continuation of the concepts and principles of nail technology. Topics include professional ethics, salon management, client relations and related skills of nail technology. Courses taken in level sequence order or department chair approval. 176 contact hours per semester.
Course Type: Technical

CSME 1545  Principles of Facial and Skin Care Technology II  5 Credits  (3 Lec, 8 Lab)
This course is a continuation of the concepts and principles in skin care and other related technologies. Topics include instruction in anatomy, physiology, theory, and related skills of facial and skin care technology. Co-requisite(s): CSME 1520, CSME 1421, CSME 1302, CSME 2431 and CSME 2333 or department chair approval. 176 contact hours per semester.
Course Type: Technical

CSME 1552  Orientation to Hair-Weaving and Braiding  5 Credits  (3 Lec, 7 Lab)
This course is an overview of the skills and knowledge necessary for the field of hair weaving and braiding. (Students may not receive credit for CSME 1552 if they have previously earned credit for CSME 1471 or CSME 1472.)
Prerequisite(s): Reading level 4.
Co-requisite(s): CSME 1457. 160 contact hours per semester.
Course Type: Technical

CSME 1553  Chemical Reformation and Related Theory  5 Credits  (3 Lec, 8 Lab)
This is a presentation of the theory and practice of chemical reformation including terminology, application and workplace competencies. Emphasis on history, chemistry, hair structure, chemical texturizing techniques, service preparation, brush and scalp techniques/analysis, shampooing and conditioning. Courses taken in level sequence order or department chair approval. (Students may not receive credit for CSME 1553 if they have previously earned credit for COSM 1321 or COSM 1312.) 176 contact hours
Course Type: Technical

CSME 2251  Preparation for the State Licensing Practical Examination  2 Credits  (1 Lec, 4 Lab)
This course is preparation for the state licensing practical examination. To obtain course credit conversion, students must pass this course with a grade of “C” or better or repeat the course. Courses taken in level sequence order or department chair approval. (Student may not receive credit for CSME 2251 if they have previously earned credit for CSME 2245). 80 contact hours per semester.
Course Type: Technical

CSME 2310  Advanced Haircutting and Related Theory  3 Credits  (1 Lec, 6 Lab)
This course focuses on advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razors, and/or clippers. Prerequisite(s): CSME 1310 and courses taken in level sequence order or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 2333  Application of Facial and Skin Care Technology II  3 Credits  (2 Lec, 3 Lab)
This course is a continuation of the Application of Facial and Skin Care Technology I. Preparation for the state licensing Facial Specialty Exam. Co-requisite(s): CSME 1520, CSME 1421, CSME 1302, CSME 1545, and CSME 2431 or department chair approval. (Students may not receive credit for CSME 2333 if they have previously earned credit for CSME 1372 or CSME 1272.) 80 contact hours per semester.
Course Type: Technical

CSME 2337  Advanced Cosmetology Techniques  3 Credits  (1 Lec, 4 Lab)
This course covers the mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies. Department chair approval. 80 contact hours per semester.
Course Type: Technical

CSME 2343  Salon Development 3 Credits  (1 Lec, 5 Lab)
This course offers procedures necessary for salon development. Topics include professional ethics, goal setting, salon operation, record keeping. Courses taken in level sequence order or department chair approval. 96 contact hours per semester.
Course Type: Technical

CSME 2350  Preparation for the State Licensing Written Examination  3 Credits  (2 Lec, 4 Lab)
This course is the preparation for the state licensing written examination. To obtain course credit conversion, students must pass this course with a grade of “C” or better or repeat the course. Courses taken in level sequence order or department chair approval. 96 contact hours per semester.
Course Type: Technical

CSME 2414  Cosmetology Instructor II  4 Credits  (2 Lec, 5 Lab)
This course is a continuation of the fundamentals of instructing cosmetology students. Prerequisite(s): CSME 1435 and 1534.
Co-requisite(s): CSME 2549 or department chair approval. 112 contact hours per semester.
Course Type: Technical
CSME 2430 Nail Enhancement  4 Credits  (3 Lec, 4 Lab)
This is a course in the theory, application, and related technology of nail enhancements. 112 contact hours
Course Type: Technical

CSME 2431 Principles of Facial and Skin Care Technology III  4 Credits  (2 Lec, 6 Lab)
This course focuses on advanced concepts and principles of skin care and other related technologies.
Prerequisite(s): CSME 1520, CSME 1421, and CSME 1302.
Co-requisite(s): CSME 1545, CSME 2333 or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 2445 Instructional Theory and Clinic Operation  4 Credits  (2 Lec, 6 Lab)
This course is an overview of the objectives required by the Texas Department of Licensing and Regulation Instructor Examination.
Prerequisite(s): CSME 1435 and 1534.
Co-requisite(s): CSME 2544 or department chair approval. 112 contact hours per semester.
Course Type: Technical

CSME 2501 Principles of Hair Coloring and Related Theory  5 Credits  (3 Lec, 8 Lab)
This course is a presentation of the theory, practice and chemistry of hair color. Topics include terminology, application, and workplace competencies related to hair color. Courses taken in level sequence order or department chair approval. 176 contact hours per semester.
Course Type: Technical

CSME 2539 Advanced Hair Design  5 Credits  (2 Lec, 9 Lab)
This course promotes advanced concepts in the theory and practice of hair design. (Students may not receive credit for CSME 2539 if they have previously earned credit in CSME 2439) Courses taken in level sequence order or department chair approval. 176 contact hours per semester.
Course Type: Technical

CSME 2544 Cosmetology Instructor IV  5 Credits  (3 Lec, 6 Lab)
This course is an advanced concepts of instruction in a Cosmetology program. Topics include demonstration, development and implementation of advanced evaluation techniques.
Prerequisite(s): CSME 1435 and 1534.
Co-requisite(s): CSME 2445 or department chair approval. 144 contact hours per semester.
Course Type: Technical

CSME 2549 Cosmetology Instructor III  5 Credits  (3 Lec, 6 Lab)
This course is a presentation of lesson plan assignments and evaluation techniques.
Prerequisite(s): CSME 1435 and 1534.
Co-requisite(s): CSME 2414 or department chair approval. 144 contact hours per semester.
Course Type: Technical

CSME 19004 Cosmetology Makeup Hours  0 Credits

CSME 41092 ST in Curriculum & Instruction  0.7-11.2 Credits

CSME 55000 Sanitation, Health & Safety for the Cosmetology Professional  0.4 Credits
Identify infection control procedures for the cosmetology industry; describe how to handle a blood spill using proper sanitation techniques; explain the purpose of the Material Safety Data Sheet (MSDS) and how to obtain one; and identify how to obtain the sanitation and safety requirements from the Cosmetology Administrative Rules.

CSME 55001 Art of Japanese Hair Straightening  0.8 Credits
This relaxing system using a flat iron: Topics include how this technique is different from other relaxing systems and the correct application procedure. Emphasis will be directed toward understanding how to correctly perform this relaxing technique and market it.

CSME 55002 Preparation for the State Licensing Written Examination-Online  3.2 Credits
You will prepare to take the written exam for the Texas State Department of Licensing. Emphasis in the study of theory in preparation for the written exam.

CSME 55003 Advanced Haircutting & Related Theory  11.2 Credits
Note: Textbook and supplies are required. This course focuses on advanced concepts and practice of haircutting. Topics include haircuts utilizing scissors, razor and/or clippers. (CSME 2310)

CSME 55004 Preparation for State Licensing Practical Exam  17.6 Credits
Preparation for the state licensing practical examination. (CSME 2541)

CSME 55005 Principles of Skin Care/Facials and Related Theory  17.6 Credits
An introduction to the theory and practice of skin care. (CSME 1547)

CSME 55006 Principles of Hair Color & Related Theory  17.6 Credits
Prerequisite(s): None Note: Textbook and supplies are required. This is an introduction of various basic hair color applications including all safety and sanitation procedures. (CSME 2501)

CSME 55007 Introduction to Haircutting & Related Theory  11.2 Credits
Note: Textbook and supplies are required. This is an introduction to the theory and practice of hair cutting. Topics include terminology, implements, sectioning and finishing techniques. (CSME 1310)

CSME 55008 Principles of Nail Technology II  17.6 Credits
Topics include advanced instruction in anatomy, physiology, theory and related skills of nail technology. (CSME 1541)

CSME 55009 Nail Enhancement  11.2 Credits
Topics include the theory of the skin and nail structure, functions, condition, lesions, growth, irregularities and diseases. (CSME 2430)

CSME 55010 Artistry of Hair Design I  11.2 Credits
This course offers instruction in hair design. Topics include the theory and applications of wet styling, thermal hair styling, finishing techniques and client communication skills. (CSME 1354)

CSME 55019 Advanced Cosmetology Techniques  8 Credits
This course focuses on the mastery of advanced cosmetology techniques including hair designs, professional cosmetology services, and workplace competencies. (CSME 2337)

CSME 55020 Chemical Reformation/Related Theory  17.6 Credits
This course features presentation of the theory and practice of chemical reformation, including terminology, application and workplace competencies. (CSME 1553)
CSME 55021 Principles of Nail Technology I 17.6 Credits
Note: Textbook and supplies required This is a course in the principles of nail technology. Topics include anatomy, physiology, theory, and related skills of nail technology. (CSME 1531)

CSME 55022 Orientation to Nail Technology I 14.4 Credits
Note: Textbook and supplies required This is an overview of the fundamental skills and knowledge necessary for the field of nail technology. Topics include bacteriology, sanitation, safety, orientation, preparation, and professional practices. (CSME 1330)

CSME 55023 Orientation to Cosmetology 17.6 Credits
Prerequisite(s): None Note: Textbook and supplies are required. This is an overview of the skills and knowledge necessary for the field of cosmetology. Topics to include the theory and/or skills related to service preparation, braiding, brush and scalp techniques, shampooing, conditioning, etc. (CSME 1501)

CSME 55024 Advanced Hair Design 17.6 Credits
Prerequisite(s): None Note: Textbooks and supplies are required. This course focuses on advanced concepts in the theory and practice of hair design. (CSME 2539)

CSME 55025 Artistry of Hair Design II 11.2 Credits
This course is a continuation of hair design. Topics include the additional theory and applications of current trends in hair design. End-of-course outcomes: Practice and mastery of workplace competencies related to hair design; and demonstrate the professional skills related to hair design. (CSME 1355)

CSME 55026 Preparation for State License Written Exam 9.6 Credits
Preparation for the state licensing written examination. (CSME 2344)

CSME 55027 Salon Development 9.6 Credits
Prerequisite(s): None Note: Textbook and materials are required. This course focuses on the applications of procedures necessary for salon development. Topics include professional ethics and goals, salon operation and record keeping. (CSME 2343)

CSME 55028 Fundamentals of Cosmetology 17.6 Credits
A course in the basic fundamentals of cosmetology. Topics include service preparation, manicure, facial, chemical services, shampoo, haircut, wet styling, and comb out. (CSME 1505)

CSME 55030 Orientation to Facial Specialist 17.6 Credits
Prerequisite(s): Reading level 4 and concurrent enrollment in CSME 1421 and CSME 1371 or department chair approval. This is an overview of the skills and knowledge necessary for the field of facials and skin care. (CSME 1520)

CSME 55031 Principles of Facial and Skin Care Technology I 12.8 Credits
Prerequisite(s): Reading level 4. Co-requisites CSME 1520, CSME 1302 and courses taken in level sequence order or department chair approval. This is an introduction to the principles of facial and skin care technology. Topics include anatomy, physiology, theory, and related skills of facial and skin care technology. (CSME 1421)

CSME 55032 Applications of Facial and Skin Care Technology I 8 Credits
Prerequisite(s): Reading level 4, CSME 1421 and CSME 1520 or department chair approval. This is a laboratory-based learning experience that enables students to apply specialized occupational theory, skills and concepts. (CSME 1302)

CSME 55033 Applications of Hair Weaving & Braiding 16 Credits
This course emphasizes hair weaving and braiding techniques to prepare students for the Texas Department of Licensing and Regulation (TDLR) examination. Students must be registered with the Texas Department of Licensing to clock the 300 hours necessary to take the exam.

CSME 55034 Orientation to Hair Weaving & Braiding 16 Credits
This course will cover the skills necessary for the field of hair weaving and braiding.

CSME 55035 Prep for State License Practical Exam 9.6 Credits
This course is the preparation for the state licensing practical examination and continued focus on client services. Prerequisite(s): Reading level 4 and courses taken in level sequence order or department chair approval. (CSME 2245)

CSME 55036 Principles of Skin Care 8 Credits
This is an introduction of the theory and practice of skin care. (CSME 1248)

CSME 55037 Principles of Facial and Skin Care Technology II 17.6 Credits
Reading Level 4,
Co-requisite(s): CSME 1520, CSME 1421, CSME 1302, CSME 2431 and CSME 2333 or department chair approval. This course is a continuation of the concepts and principles in skin care and other related technologies. Topics include advanced instruction in anatomy, physiology, theory and related skills of facial and skin care technology. (CSME 1545)

CSME 55038 Principles of Facial and Skin Care Technology III 12.8 Credits
Reading level 4, CSME 1520, CSME 1421, and CSME 1302.
Co-requisite(s): CSME 1545, CSME 2333 or department chair approval. This course focuses on advanced concepts and principles of skin care and other related technologies. (CSME 2431)

CSME 55039 Applications of Facial and Skin Care Technology II 8 Credits
Prerequisite(s): Reading Level 4,
Co-requisite(s): CSME 1520, CSME 1421, CSME 1302, CSME 1545 and CSME 2431 or department chair approval This course is a continuation of the Application of Facial and Skin Care Technology I. Emphasis will be on the preparation for the state licensing Facial Specialty Exam. (CSME 2333)

CSME 55040 Application of Eyelash Extensions I 9.6 Credits
Prerequisite(s): Concurrent enrollment required in Orientation, Principles, and Application of Eyelash Extension. This course provides the student with the skills necessary to perform client services using current techniques and business practices.

CSME 55041 Orientation to Eyelash Extensions 14.4 Credits
Prerequisite(s): Concurrent enrollment required in Orientation, Principles, and Application of Eyelash Extension This course provides the student with the basic knowledge of chemistry, eyelash growth cycles and proper selection, supplies and equipment of the industry, safety, sanitation, laws and rules of TDLR as they relate to eyelash extensions.

CSME 55042 Principles of Eyelash Extensions 8 Credits
Prerequisite(s): Concurrent enrollment required in Orientation, Principles, and Application of Eyelash Extension This course provides the student with the practical skills necessary to safely and effectively apply eyelash extensions.
CSME 59000  Cosmetology Make up Hours  0.15-16 Credits
To be used for cosmetology students who need to put in additional clock hours before the end of the term.
CJCR 1304 Probation and Parole 3 Credits (3 Lec, 0 Lab)
This is a survey of the structure, organization, and operation of probation and parole services. Emphasis on applicable state statutes and administrative guidelines.
Prerequisite(s): Reading level 4
Course Type: Technical

CJCR 1307 Correctional Systems and Practices 3 Credits (3 Lec, 0 Lab)
This is a study on corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues. Credit will not be given for both CJCR 1307 and CRIJ 2313.
Course Type: Technical

CJCR 2324 Community Resources in Corrections 3 Credits (3 Lec, 0 Lab)
This course is an overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment. Credit will not be given for both CJCR 2324 and CRIJ 2301.
Course Type: Technical
CJLE 1327 Interviewing and Report Writing for Criminal Justice Professions 3 Credits (3 Lec, 0 Lab)
This course covers instruction and skill development in interviewing, note taking, and report writing in the criminal justice context; development of skills to conduct investigations by interviewing witnesses, victims, and suspects properly; and organization of information regarding incidents into effective written reports.
Course Type: Technical

CJLE 1333 Traffic Law and Investigation 3 Credits (3 Lec, 0 Lab)
This course covers instruction in the basic principles of traffic control, traffic law enforcement, court procedures, and traffic law. Emphasis is on the need for a professional approach in dealing with traffic law violators and the police role in accident investigation and traffic supervision.
Course Type: Technical

CJLE 41000 Interviewing and Report Writing 4.8-9.6 Credits
CJLE 41001 Basic Mental Health Officer Certification 1.6-4 Credits
CJLE 41002 Behavior Analysis Interview Techniques 2.4-8 Credits
CJLE 41003 Police Radar Certification 0.8-1.6 Credits
CJLE 41004 Basic Telecommunication Certification 4-9.6 Credits
CJLE 41005 LE - Basic Reserve Peace Officer Certification 11.4-12.5 Credits
CJLE 41006 Basic Peace Officer I 14-17.6 Credits
CJLE 41007 Traffic Law 0.8-0.8 Credits
CJLE 41008 LE - Basic Reserve Peace Officer Certification 11.4-12.5 Credits
CJLE 41009 Criminal Interdiction 0.8-1.6 Credits
CJLE 41010 Texas Alcoholic Beverage Code 0.8-0.8 Credits
CJLE 41011 Basic Firearms 1.6-4.8 Credits
CJLE 41012 Basic Peace Officer II 14-17.6 Credits
CJLE 41013 Police Motorcycle Operator 0.8-4.8 Credits
CJLE 41014 Hate Crimes 0.8-4 Credits
CJLE 41015 Defensive Tactics - Expandable 0.8-0.8 Credits
CJLE 41016 Intoxilyzer Operator Certification 3.2-4 Credits
CJLE 41017 Critical Incident Orientation 0.7-2.4 Credits
CJLE 41018 Basic Peace Officer III 14-17.6 Credits
CJLE 41019 Law Enforcement Honor Guard 1.6-4.8 Credits
CJLE 41020 LE - Cultural Diversity 0.8-3.2 Credits
CJLE 41021 Defensive Tactics - Firearms 0.8-4 Credits
CJLE 41023 LE - Firearms 3.2-4.8 Credits
CJLE 41024 Basic Peace Officer IV 14-17.6 Credits
CJLE 41026 LE - Basic Crime Prevention 4-6.4 Credits
CJLE 41027 Interviewing and Report Writing 4.8-9.6 Credits
CJLE 41030 New Supervisors 2-4.8 Credits
CJLE 41040 Special Investigative Topics 1.6-2.4 Credits
CJLE 41041 Sexual Assault Investigation S 0.8-4.8 Credits
CJLE 41045 Intermediate Crime Scene Investigation 3.2-4.8 Credits
CJLE 41049 Intermediate Arrest, Search, and Seizure 1.6-4.8 Credits
CJLE 41050 LE - Supplemental Peace Officer Certification 11-11 Credits
CJLE 41051 LE - Supplemental Peace Officer Certification 11-11 Credits
CJLE 41052 LE - Narcotics and Controlled Substances 1.6-4.8 Credits
CJLE 41054 LE - Dispatcher, Communication 3.2-4.8 Credits
CJLE 41055 LE - First Line Supervision 2-2 Credits
CJLE 41056 LE - Statutory Authority for Uniformed Law Enforcement Officers 0.7-1.6 Credits
CJLE 41057 LE - Crime Scene Search 2.3-4.8 Credits
CJLE 41058 Rights of Prisoners 4.8-4.8 Credits
CJLE 41094 Special Topics in Law Enforcement 0.7-11.2 Credits
CJLE 42001 LE - Intermediate Firearms 1.6-4.8 Credits
CJLE 42002 LE - Arrest, Search, and Seizure 1.5-3.2 Credits
CJLE 42003 Intermediate Child Abuse Prevention 2.4-4.8 Credits
CJLE 42004 Tactical Skills with a Single Firearm 0.8-3.2 Credits
CJLE 42005 LE - Intermediate Dispatcher 0.8-4.8 Credits
CJLE 42006 LE - Intermediate Crime Prevention 1.6-4.8 Credits
CJLE 55001  CSI Forensics Workshop  0.8 Credits
CJLE 55002  Public Information Officer and Joint Information Center Training  1.6 Credits
The entire course is recommended for all Incident Commanders, Public Information Officers, Joint Information Center staff, and media Spokespersons for any local, state, federal agency, school, hospital, private sector industry and non-governmental organizations who would work together to respond to any emergency under the National Incident Management System (NIMS).

CJLE 55003  Criminal Investigations  4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook required This is a study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences; and trial preparation. (CRIJ 2314)

CJLE 55004  Traffic Law and Investigations  4.8 Credits
Prerequisite(s): Reading level 4. This course covers instruction in the basic principles of traffic control, traffic law enforcement, court procedures, and traffic law. Emphasis is on the need for a professional approach in dealing with traffic law violators, and the police role in accident investigation and traffic supervision. (CJLE 1333)

CJLE 55023  Leadership Training-The New Supervisor  2.4 Credits
Values, ethics, principles, communication, leadership styles, cultural diversity, racial sensitivity, planning, and organizing. This course builds leaders’ skills in handling chronic performance or work-habit problems or serious misconduct. They learn how to document the problem and explain what the employee must do to address it. Leaders are skilled in discussing and imposing formal consequences while adhering to their organizations’ disciplinary policies and procedures.
CRIMINAL JUSTICE (CJSA)

CJSA 1308 Criminalistics | 3 Credits | (3 Lec, 0 Lab)
This course is an introduction to the field of criminalistics. Topics include the application of scientific and technical methods in the investigation of crime including location, identification, and handling of evidence for scientific analysis.
Course Type: Technical

CJSA 1312 Crime in America | 3 Credits | (3 Lec, 0 Lab)
This course covers the study of crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and crime prevention. (Note: Credit will not be given for both CJSA 1312 and CRIJ 1307.)
Course Type: Technical

CJSA 1313 Court Systems and Practices | 3 Credits | (3 Lec, 0 Lab)
This course examines the role of the judiciary in the criminal justice system. Topics include the structure of the American court system, prosecution, right to counsel, pretrial release, grand jury process, adjudication process, types and rules of evidence, and sentencing concepts. (Note: Credit will not be given for both CJSA 1313 and CRIJ 1306.)
Course Type: Technical

CJSA 1317 Juvenile Justice System | 3 Credits | (3 Lec, 0 Lab)
This course is a study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. (Note: Credit will not be given for both CJSA 1317 and CRIJ 1313.)
Course Type: Technical

CJSA 1322 Introduction to Criminal Justice | 3 Credits | (3 Lec, 0 Lab)
This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. Credit will not be given for both CRIJ 1301 and CJSA 1322.
Course Type: Technical

CJSA 1327 Fundamentals of Criminal Law | 3 Credits | (3 Lec, 0 Lab)
This course is the study of the nature of criminal law. Topics include philosophical and historical development, major definitions and concepts, classification of crime, elements of crimes and penalties using Texas statutes as illustrations, and criminal responsibility. Credit will not be given for both CRIJ 1310 and CJSA 1327.
Course Type: Technical

CJSA 1342 Criminal Investigation | 3 Credits | (3 Lec, 0 Lab)
This course is a study of investigative theory, collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, and trial preparation. (Note: credit will not be given for both CJSA 1342 and CRIJ 2314.)
Course Type: Technical

CJSA 1348 Ethics in Criminal Justice | 3 Credits | (3 Lec, 0 Lab)
This course is a study of ethical philosophies and issues pertaining to the various professions in the criminal justice system. Includes ethical issues emanating from constitutional conflict with public protection and individual rights, civil liberties, and correctional policies.
Course Type: Technical

CJSA 1351 Use of Force | 3 Credits | (3 Lec, 0 Lab)
This course is a study of the use of force including introduction to and statutory authority for the use of force, force options, deadly force, and related legal issues. Fulfills the Texas Commission on Law Enforcement Use of Force Intermediate Certificate requirement.
Course Type: Technical

CJSA 1359 Police Systems and Practices | 3 Credits | (3 Lec, 0 Lab)
This course explores the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. (Note: credit will not be given for both CJSA 1359 and CRIJ 2328.)
Course Type: Technical

CJSA 1374 Crime Prevention | 3 Credits | (3 Lec, 0 Lab)
This course is a study of the prevention of crime through cooperative ventures between law enforcement agencies and the communities they serve. Emphasis is on the prevention of crimes against property both in businesses and in the home. It includes history of crime prevention, physical security measures, special problems in loss control, and security survey procedures.
Prerequisite(s): Reading level 4
Course Type: Technical

CJSA 2300 Legal Aspects of Law Enforcement | 3 Credits | (3 Lec, 0 Lab)
This is an exploration of police authority. Topics include responsibilities and constitutional restraints, law of arrest, search and seizure, and police liability. (Note: credit will not be given for both CJSA 2300 and CRIJ 2323.)
Course Type: Technical

CJSA 2302 Police Management, Supervision, and Related Topics | 3 Credits | (3 Lec, 0 Lab)
This course covers techniques and theories regarding dealing with people, their performance and problems. Topics include basic supervision, leadership, time management, first-line supervision, and management by objectives.
Prerequisite(s): Reading level 4
Course Type: Technical

CJSA 2364 Practicum (or Field Experience) - Criminal Justice/Safety Studies | 3 Credits | (0 Lec, 21 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. The plan relates the workplace training and experiences to the student's general and technical course of study, and it includes a written agreement between the educational institution and a business or industry. Monitored and supervised by the instructor and a workplace employee, the student achieves objectives that are developed and documented by the College, and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. Prerequisite(s): 15 credit hours of criminal justice courses (9 of these credit hours must be earned at San Jacinto College), and an accumulative GPA of at least 2.0 is required. (Note: the student must receive approval to enroll from instructor at least 60 days prior to start of course.)
Course Type: Technical
CJSA 41001 LE - Field Instruction Officer  1-4 Credits
CJSA 41006 LE - Civil Process  1.6-4.8 Credits
CJSA 41010 LE - Criminal Laws  1.6-4.8 Credits
CJSA 41015 LE - Update Criminal Laws  0.7-3.2 Credits
CJSA 41041 LE - Intermediate Police Manag  1.6-4.8 Credits
CJSA 41051 Use of Force  4.8-9.6 Credits
CJSA 41092 Special Topics in Criminal Jus  0.7-11.2 Credits
CJSA 42002 Police Management, Supervision  4.8-4.8 Credits
CJSA 55000 Intro to Criminal Justice  4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook required This course covers the history and philosophy of criminal justice and ethical considerations; crime defined, its nature and impact, overview of criminal justice system; law enforcement; court system; prosecution and defense; trial process; and corrections. (CRIJ 1301)

CJSA 55001 Court Systems & Practices  4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook required This course includes examination of the role of the judiciary in the criminal justice system. Topics include the structure of the American court system, prosecution, right to counsel, pretrial release, grand jury process, adjudication process, types and rules of evidence, and sentencing concepts. (CRIJ 1306)

CJSA 55002 Crime in America  4.8 Credits
This course covers the study of crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and crime prevention. (CRIJ 1307)
Prerequisite(s): Reading level 4 Note: Textbook required

CJSA 55003 Fundamentals of Criminal Law  4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook required This course is a study of the nature of criminal law. Topics include philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties and individual criminal responsibilities. (CRIJ 1310)

CJSA 55004 Correctional Systems and Practices  4.8 Credits
Prerequisite(s): Reading level 4 Note: Textbook required This course covers corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues. (CRIJ 2313)

CJSA 55005 Legal Aspects for Law Enforcement  4.8 Credits
This is a study of police authority; responsibilities; constitutional constraints; laws of arrest; search and seizure; police civil liability. (CRIJ 2323)
Prerequisite(s): Reading level 4

CJSA 55007 Juvenile Justice System  4.8 Credits
This course is a study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. (CRIJ 1313)
Prerequisite(s): Reading level 4

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CRIMINAL JUSTICE (CRIJ)

CRIJ 1301 Introduction to Criminal Justice 3 Credits (3 Lec, 0 Lab)
This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. Credit will not be given for both CRIJ 1301 and CJSA 1322.
Course Type: Academic

CRIJ 1306 Court Systems and Practices 3 Credits (3 Lec, 0 Lab)
This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. Topics include the structure of the American court system, prosecution, right to counsel, pretrial release, grand jury process, adjudication process, types and rules of evidence, and sentencing concepts. Credit will not be given for both CRIJ 1306 and CJSA 1313.
Course Type: Academic

CRIJ 1307 Crime in America 3 Credits (3 Lec, 0 Lab)
This course covers the study of crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and crime prevention. Prerequisite(s): Reading level 4. Credit will not be given for both CRIJ 1307 and CJSA 1312.
Course Type: Academic

CRIJ 1310 Fundamentals of Criminal Law 3 Credits (3 Lec, 0 Lab)
This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability. Credit will not be given for both CRIJ 1310 and CJSA 1327.
Course Type: Academic

CRIJ 1313 Juvenile Justice System 3 Credits (3 Lec, 0 Lab)
This course is a study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. Credit will not be given for both CRIJ 1313 and CJSA 1317.
Course Type: Academic

CRIJ 2301 Community Resources in Corrections 3 Credits (3 Lec, 0 Lab)
This is an overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment. Credit will not be given for both CRIJ 2301 and CJCR 2324.
Course Type: Academic

CRIJ 2313 Correctional Systems and Practices 3 Credits (3 Lec, 0 Lab)
This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. Credit will not be given for both CRIJ 2313 and CJCR 1307.
Course Type: Academic

CRIJ 2314 Criminal Investigation 3 Credits (3 Lec, 0 Lab)
This is a study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences; and trial preparation. Credit will not be given for both CRIJ 2314 and CJSA 1342.
Course Type: Academic

CRIJ 2323 Legal Aspects of Law Enforcement 3 Credits (3 Lec, 0 Lab)
This is a study of police authority; responsibilities; constitutional constraints; laws of arrest; search and seizure; police civil liability. Credit will not be given for both CRIJ 2323 and CJSA 2300.
Course Type: Academic

CRIJ 2328 Police Systems and Practices 3 Credits (3 Lec, 0 Lab)
This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. Credit will not be given for both CRIJ 2328 and CJSA 1359.
Course Type: Academic

CRIJ 29001 Rape Aggression Defense 0 Credits
CRIJ 49001 Criminal Justice (H.S.) 0 Credits
CULINARY ARTS (FDST)

FDST 1305 Food Svc Equipment & Planning 3 Credits
Course Type: Technical
CULINARY ARTS (IFWA)

IFWA 1205  Food Service Equipment and Planning  2 Credits  (2 Lec, 1 Lab)
This is a study of various types of food service equipment and the planning of equipment layout for product flow and efficient operation.
Course Type: Technical

IFWA 1305  Food Service Equipment and Planning  3 Credits  (3 Lec, 0 Lab)
This course is a study of various types of food service equipment and the planning of equipment layout for product flow and efficient operation.
Course Type: Technical

IFWA 1318  Nutrition for the Food Service Professional  3 Credits  (3 Lec, 0 Lab)
This course is an introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques.
Course Type: Technical

IFWA 1319  Meat Identifying and Processing  3 Credits  (1 Lec, 4 Lab)
This course is a study of the identification and characteristics of wholesale and retail cuts of meat; hotel, restaurant, and institutional cuts of meat; U.S.D.A. quality grades; quality control; and the Federal Meat Inspection Regulation. Pre-requisites: CHEF 1401, CHEF 1205
Course Type: Technical

IFWA 2341  Specialized Food Preparation  3 Credits  (2 Lec, 4 Lab)
This is a study of ethnic/regional cooking with actual preparation of local favorite dishes and common international favorites.
Prerequisite(s): CHEF 1401
Course Type: Technical

IFWA 2446  Quantity Procedures  4 Credits  (2 Lec, 8 Lab)
This course includes the exploration of the theory and application of quantity procedures for the operation of commercial, institutional, and industrial food services. Emphasis on quantity cookery and distribution.
Co-requisite(s): CHEF 1205
Course Type: Technical

IFWA 55000  Nutrition for the Food Service Professional  4.8 Credits
This introduction to nutrition includes a study of nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques.

IFWA 55001  Food Service Equipment & Planning  4.8 Credits
This is a study of various types of food service equipment and the planning of equipment layout for product flow and efficient operation.
(IFWA 1305)

IFWA 55002  Bilingual Food Handler Certification  1.6 Credits
This course focuses on personal hygiene, safe food handling, and food bacteriology. At the conclusion of the course students will take the ServSafe Certification exam.
CULINARY ARTS (PSTR)

PSTR 1301 Fundamentals of Baking  3 Credits  (2 Lec, 4 Lab)
This is a course in fundamentals of baking including dough, quick breads, pies, cakes, cookies and tarts. Instruction in flours, fillings and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products.
Co-requisite(s): CHEF 1205
Course Type: Technical

PSTR 1306 Cake Decorating I  3 Credits  (2 Lec, 4 Lab)
This is an introduction to skills, concepts and techniques of cake decorating.
Co-requisite(s): PSTR 1301 and CHEF 1205
Course Type: Technical

PSTR 1342 Quantity Bakeshop Production  3 Credits  (1 Lec, 5 Lab)
This is a study of advanced baking techniques to include volume production of a variety of breads and desserts.
Co-requisite(s): PSTR 1301 and CHEF 1205
Course Type: Technical

PSTR 2301 Chocolates and Confections  3 Credits  (2 Lec, 4 Lab)
This course covers production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolates, caramels, nougats, and pate de fruit.
Prerequisite(s): CHEF 1205, PSTR 1301, PSTR 1306, PSTR 1342;
Co-requisite(s): PSTR 2307
Course Type: Technical

PSTR 2307 Cake Decorating II  3 Credits  (2 Lec, 4 Lab)
This is a course in decoration of specialized and seasonal products.
Prerequisite(s): CHEF 1205, PSTR 1301, PSTR 1342, PSTR 1306;
Co-requisite(s): PSTR 2301
Course Type: Technical

PSTR 2350 Wedding Cakes  3 Credits  (2 Lec, 4 Lab)
This course introduces the skills, concepts and techniques for preparing wedding cakes. Includes marzipan, molding chocolate-rolled fondant, chocolate garnish, flower making and royal icing piping work.
Prerequisite(s): CHEF 1401, PSTR 1301 and PSTR 2431
Course Type: Technical

PSTR 2365 Practicum - Baking and Pastry  3 Credits  (0 Lec, 21 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. This course offered in conjunction with the Associate of Applied Science Restaurant Management degree. Departmental Approval required.
Course Type: Technical

PSTR 2431 Advanced Pastry Shop  4 Credits  (2 Lec, 4 Lab)
This is a study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Prerequisite or Co-requisite(s): PSTR 1301, CHEF 1205
Course Type: Technical

PSTR 2470 Healthy Baking and Pastries  4 Credits  (3 Lec, 3 Lab)
This course covers the principles of a healthy diet as it relates to baking and pastry goods and production of healthy alternatives to traditional baked and pastry goods.
Prerequisite(s): PSTR 1301
Course Type: Technical

PSTR 41006 Cake Decorating I  3.2-8 Credits
PSTR 49001 Cake Decorating  60 Credits
PSTR 55000 Advanced Pastry Shop  12.8 Credits
Prerequisite(s): CHEF 1205 Sanitation and Safety and PSTR 1301
Fundamentals Note: Textbook required. This is a study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. (PSTR 2331)

PSTR 55001 Fundamentals of Baking  9.6 Credits
Prerequisite(s): CHEF 1205 Sanitation and Safety
This is a course in the fundamentals of baking, including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. There is instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flours. (PSTR 1301)

PSTR 55002 Cake Decorating I  4.8 Credits
Introduction to skills, concepts and techniques of cake decorating.
(PSTR 1306)

PSTR 55003 Cake Decorating II  4.8 Credits
A course in decoration of specialized and seasonal products.
(PSTR 2307)

PSTR 55004 Quantity Bakeshop Production  9.6 Credits
Co-requisite(s): PSTR 1301 and CHEF 1205 This course is a study of advanced baking techniques to include volume production of a variety of breads and desserts.

PSTR 55005 Chocolates and Confections  9.6 Credits
Prerequisites: CHEF 1205, PSTR 1301, PSTR 1306, PSTR 1342;
Co-requisite(s): PSTR 2307 This course covers production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolates, caramels, nougats, and pate de fruit. The student will prepare tempered and molded chocolates; and prepare a variety of filled and dipped chocolates.
PSTR 55006  Chocolates and Confections  9.6 Credits
Prerequisite(s): CHEF 1205, PSTR 1301, PSTR 1306, PSTR 1342;
Co-requisite(s): PSTR 2307 This course covers production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolates, caramels, nougats, and pate de fruit. The student will prepare tempered and molded chocolates; and prepare a variety of filled and dipped chocolates.
CULINARY ARTS (RSTO)

RSTO 1301 Beverage Management 3 Credits  (3 Lec, 0 Lab)
This is a study of the beverage service of the hospitality industry including spirits, wines, beers, and non-alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods.
Course Type: Technical

RSTO 1304 Dining Room Service 3 Credits  (3 Lec, 0 Lab)
This will introduce students to the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel.
Course Type: Technical

RSTO 1313 Hospitality Supervision 3 Credits  (3 Lec, 0 Lab)
This course includes fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development.
Course Type: Technical

RSTO 1325 Purchasing for Hospitality Operations 3 Credits  (3 Lec, 0 Lab)
This is a study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle.
Course Type: Technical

RSTO 2301 Principles of Food and Beverage Control 3 Credits  (3 Lec, 0 Lab)
This is a study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food and beverage labor costs, operational analysis, and international and regulatory reporting procedures.
Course Type: Technical

RSTO 2307 Catering 3 Credits  (3 Lec, 0 Lab)
This course covers principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques.
Course Type: Technical

RSTO 2365 Practicum (or Field Experience) - Restaurant, Culinary, and Catering Management/Manager 3 Credits  (0 Lec, 21 Lab)
This course offers practical general workplace training supported by an individualized learning plan developed by the employer, the College, and student.
Course Type: Technical

RSTO 2405 Management of Food Production and Service 4 Credits  (3 Lec, 3 Lab)
This is a study of quantity cookery and management problems pertaining to commercial and institutional food service, merchandising and variety in menu planning, and customer food preferences. Includes laboratory experiences in quantity food preparation and service.
Course Type: Technical

RSTO 2431 Food Service Management 4 Credits  (2 Lec, 8 Lab)
This course covers mastery of actual management experiences in supervision, training, planning, and control of a variety of food service operation formats may include cafeteria, table service, meetings, banquets, and catered events. Students may not receive credit for both RSTO 2431 and RSTO 2405.
Co-requisite(s): CHEF 1205
Course Type: Technical

RSTO 55000 Management of Food Production and Service 9.6 Credits
Study of management problems from the perspective of food production and service arena.

RSTO 55001 Principles of Food and Beverage Controls 4.8 Credits
This study of financial principles and controls of food service operation includes a review of operation policies and procedures. Topics also include financial budgeting and cost analysis, emphasizing food and beverage labor costs, operational analysis, and international and regulatory reporting procedures. (RSTO 2301)

RSTO 55002 Hospitality Supervision 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This course focuses on fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development. (RSTO 1313)

RSTO 55003 Food Service Management 12.8 Credits
This course covers the mastery of actual management experiences in supervision, training, planning, and control of a variety of food service operation formats, including cafeteria, table service, meetings, banquets, and catered events. (RSTO 2431)

RSTO 55004 Purchasing for Hospitality Operations 4.8 Credits
This study of purchasing and inventory management of foods and other supplies includes practice in development of purchase specifications, determination of order quantities, formal and informal price comparison, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. (RSTO 1325)

RSTO 55005 Beverage Management 4.8 Credits
This is a study of the beverage service of the hospitality industry, including spirits, wines, beers, and non-alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, serving, and the selection of wines to enhance foods. (RSTO 1301)
CULINARY ARTS/CHEF TR (CHEF)

CHEF 1205 Sanitation and Safety 2 Credits (2 Lec, 0 Lab)
This is a study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and workplace safety standards.
Course Type: Technical

CHEF 1310 Garde Manger 3 Credits (1 Lec, 4 Lab)
This is a study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods.
Prerequisite(s): CHEF 1205 or PSTR 1301 and
Co-requisite(s): CHEF 1205
Course Type: Technical

CHEF 1313 Food Service Operation/Systems 3 Credits (3 Lec, 0 Lab)
This course is an overview of the information needs of food and lodging properties. Emphasis is on both front, back, and material management utilizing computer systems.
Course Type: Technical

CHEF 1314 A La Carte Cooking 3 Credits (2 Lec, 4 Lab)
This course covers a la carte "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of work station, employment of appropriate cooking methods, plating, and saucing principles.
Prerequisite(s): CHEF 1205
Course Type: Technical

CHEF 1401 Basic Food Preparation 4 Credits (3 Lec, 3 Lab)
This is a study of the fundamental principles of food preparation and cookery to include the Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism.
Co-requisite(s): CHEF 1205
Course Type: Technical

CHEF 1402 Principles of Healthy Cuisine 4 Credits (3 Lec, 3 Lab)
This course is an introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style.
Prerequisite(s): CHEF 1401
Course Type: Technical

CHEF 1410 Garde Manger 4 Credits (2 Lec, 4 Lab)
This is a study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods.
Prerequisite(s): CHEF 1401 or PSTR 1301 and
Co-requisite(s): CHEF 1205
Course Type: Technical

CHEF 1445 International Cuisine 4 Credits (2 Lec, 4 Lab)
This course covers the study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and in other regions of the world. Pre-requisite: CHEF 1401,
Co-requisite(s): CHEF 1205
Course Type: Technical

CHEF 2302 Saucier 3 Credits (2 Lec, 4 Lab)
This course focuses on instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods.
Prerequisite(s): CHEF 1401
Course Type: Technical

CHEF 2365 Practicum (or Field Experience) - Culinary Arts/Chef Training 3 Credits (0 Lec, 21 Lab)
This course offers practical general workplace training supported by an individualized learning plan developed by the employer, the College and student.
Prerequisite(s): This course offered in conjunction with the Associate of Applied Science Culinary Arts-Chef Training degree. Departmental Approval required.
Course Type: Technical

CHEF 55000 Basic Food Preparation 6.4 Credits
A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism

CHEF 55001 Sanitation and Safety 3.2 Credits
Prerequisite(s): Reading Level 4. Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. Textbook required. This is a study of personal cleanliness; sanitary practices in food preparation; causes, investigation and control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. Students learn fundamental principles and related legal, moral, and economic issues of sanitation and safety management in public health as related to food service institutions, hospitality industries, and other related operations. (CHEF 1205)

CHEF 55002 International Cuisine 11.2 Credits
This is a study of classical cooking skills associated with the preparation and service of international and ethnic cuisines. Topics include similarities between food production systems used in the United States and in other regions of the world. (CHEF 1345)

CHEF 55003 Garde Manager 9.6 Credits
Prerequisite(s): None Note:Textbook required This study of specialty foods and garnishes emphasizes design, techniques, display of fine foods, and basic garde manger principles and training techniques for food service professionals. (CHEF 1410)

CHEF 55004 Basic Food Preparation 9.6 Credits
Co-requisite(s): CHEF 1205 This is a study of the fundamental principles of food preparation and cookery to include the Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. (CHEF 1401)
CHEF 55005  Saucier  9.6 Credits  
This course focuses on the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. (CHEF 2402)  

CHEF 55006  Basic Food Prep - North  9.6 Credits  
A study of the fundamental principles of food preparation and cookery to include Brigade System, cooking techniques, material handling, heat transfer, sanitation, safety, nutrition, and professionalism. (CHEF 1301)
DANCE (DANC)

DANC 1112 Dance Practicum 1 Credit (0 Lec, 3 Lab)
This course is a practicum in dance as a performance art. It includes exploration of dance as an art form through participation in improvisational movement study and improvisational contact work/partnering.
Course Type: Academic

DANC 1151 Freshman Dance Performance 1 Credit (0 Lec, 4 Lab)
This course offers instruction in dance performance through experiential projects at the freshman level. May be repeated for credit once.
Co-requisite(s): concurrent enrollment in a technique course or department chair approval required.
Course Type: Academic

DANC 1201 Dance Composition - Improvisation 2 Credits (1 Lec, 3 Lab)
This course in improvisation will investigate spontaneous problem solving as a means of generating movement for dance composition. Students will be called upon to explore and respond to various forms of stimuli in a safe and supportive learning environment within solo and group work.
Course Type: Academic

DANC 1204 Beginning Ballet 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the fundamental techniques and concepts associated with ballet. May be repeated for credit once.
Course Type: Academic

DANC 1205 Intermediate Ballet 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the intermediate techniques and concepts associated with ballet. May be repeated for credit once.
Course Type: Academic

DANC 1206 Beginning Modern Dance 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the fundamental techniques and concepts associated with the concert form of modern dance. May be repeated for credit once.
Course Type: Academic

DANC 1207 Beginning Jazz Dance 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the fundamental techniques and concepts associated with jazz dance. May be repeated for credit once.
Course Type: Academic

DANC 1301 Dance Composition - Choreography 3 Credits (2 Lec, 2 Lab)
This course is an examination of the principles of movement generation, phrasing, choreographic structure, and manipulation. Integration of choreographic principles will foster the growth of personal artistic style.
Prerequisite(s): DANC 1201 Dance Composition-Improvisation
Course Type: Academic

DANC 1302 World Dance 3 Credits (2 Lec, 2 Lab)
This course offers a survey of dances from different cultures, their histories, and their influences on contemporary dance and society. Cultural origins, significance, motivations and techniques will be explored experientially.
Course Type: Academic

DANC 2241 Intermediate Ballet 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the intermediate techniques and concepts associated with ballet. May be repeated for credit once.
Course Type: Academic

DANC 2245 Intermediate Modern Dance 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the intermediate techniques and concepts associated with the concert form of modern dance. May be repeated for credit once.
Course Type: Academic

DANC 2247 Intermediate Jazz Dance 2 Credits (1 Lec, 3 Lab)
This course offers instruction in the intermediate techniques and concepts associated with jazz dance. May be repeated for credit once.
Course Type: Academic

DANC 2303 Dance Appreciation 3 Credits (3 Lec, 0 Lab)
This course offers a general survey of dance forms designed to create an appreciation of the vocabulary, techniques, and purposes of the creative process. This course includes critical interpretation and evaluations of choreographic works and dance forms within cultural and historical contexts.
Course Type: Academic

DANC 2389 Academic Cooperative 3 Credits (1 Lec, 8 Lab)
This course is an instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of dance.
Course Type: Academic

DANC 39021 Ballroom Brush-Up Social Dance 1.2 Credits
DANC 39024 Ballroom Dance Private Lessons 0 Credits
DIESEL TECHNOLOGY (DEMR)

DEMR 1229 Preventative Maintenance 2 Credits (1 Lec, 2 Lab)
This is an introductory course designed to provide the student with basic knowledge of proper servicing practices. Contents includes record keeping and condition of major systems.
Course Type: Technical

DEMR 1301 Shop Safety and Procedures 3 Credits (3 Lec, 0 Lab)
This is a study of shop safety, rules, basic shop tools, and test equipment.
Course Type: Technical

DEMR 1306 Diesel Engine I 3 Credits (2 Lec, 4 Lab)
This course is an introduction to the basic principles of diesel engines and systems.
Course Type: Technical

DEMR 1317 Basic Brake Systems 3 Credits (2 Lec, 4 Lab)
This course is an introduction to the basic principles of brake systems of diesel powered equipment, with an emphasis on maintenance, repairs, and troubleshooting.
Course Type: Technical

DEMR 1405 Basic Electrical Systems 4 Credits (3 Lec, 3 Lab)
This course is an introduction to basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, batteries, and regulators.
Course Type: Technical

DEMR 1410 Diesel Engine Testing and Repair I 4 Credits (3 Lec, 3 Lab)
This course is an introduction to testing and repairing diesel engines including related systems and specialized tools.
Course Type: Technical

DEMR 1413 Fuel Systems 4 Credits (3 Lec, 3 Lab)
This course is an in-depth coverage of fuel injector pumps and injection systems.
Course Type: Technical

DEMR 1421 Power Train I 4 Credits (3 Lec, 3 Lab)
This course is an introduction to fundamental repair and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair.
Course Type: Technical

DEMR 1423 Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair 4 Credits (3 Lec, 3 Lab)
This course is an introduction to heating, ventilation, and air conditioning theory, testing and repair, with an emphasis on refrigerant reclamation, safety procedures, specialized tools and repairs.
Course Type: Technical

DEMR 2266 Field Experience-Diesel Mechanics 2 Credits (0 Lec, 16 Lab)
This course offers practical and general workplace training supported by an individual learning plan developed by the employer, college, and student.
Prerequisite(s): 15 credit hours in diesel technology at San Jacinto College
Course Type: Technical

DEMR 2334 Advanced Diesel Tune-up and Troubleshooting 3 Credits (2 Lec, 4 Lab)
This course includes advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach.
Course Type: Technical

DEMR 2412 Diesel Engine Testing and Repair II 4 Credits (3 Lec, 3 Lab)
This course is a continuation of Diesel Engine Testing and Repair I. It includes coverage of testing and repairing diesel engines including related systems and specialized tools.
Course Type: Technical

DEMR 2432 Electronic Controls 4 Credits (3 Lec, 3 Lab)
This course covers advanced skills in diagnostic and programming techniques of electronic control systems.
Course Type: Technical

DEMR 49001 Diesel (H.S.) 0 Credits

DEMR 55000 Basic Electrical Systems 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an introduction to the basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, batteries and regulators. (DEMR 1405)

DEMR 55001 Advanced Diesel Tune-up and Troubleshooting 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook Required. This course includes advanced concepts and skills required for tune-up and troubleshooting procedures of diesel engines, with an emphasis on the science of diagnostics with a common sense approach. (DEMR 2334)

DEMR 55002 Shop Safety & Procedures 4.8 Credits
Prerequisite(s): Reading Level 4. Note: Textbook is required. A study of shop safety, rules, basic shop tools and test equipment. (DEMR 1301)

DEMR 55003 Diesel Engine II 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook Required. This course is an in-depth coverage of disassembly, repair, identification, evaluation, and reassembly of diesel engines. (DEMR 1449)

DEMR 55004 HVAC Troubleshooting Repair 9.6 Credits
This course is an introduction to heating, ventilation and air conditioning theory, testing and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools and repairs. (DEMR 1423)

DEMR 55005 Diesel Engine I 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook Required. This is an introduction to the basic principles of diesel engines and systems. (DEMR 1306)

DEMR 55006 Basic Brake Systems 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an introduction to the basic principles of brake systems of diesel powered equipment with an emphasis on maintenance, repairs and troubleshooting. (DEMR 1317)

DEMR 55007 Diesel Engine Testing I 9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. Introduces student to diesel engine testing and repair including associated systems and specialized tools. (DEMR 1410)
DEMR 55008  Electronic Controls  9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This course covers advanced skills in diagnostic and programming techniques of electronic control systems. (DEMR 2432)

DEMR 55009  Power Train I  9.6 Credits
Prerequisite(s): Reading Level 4. Textbook is required. This is an introduction to fundamentals, repair and theory of power trains including clutches, transmissions, drive shafts, and differentials, with an emphasis on inspection and repair. Specific attention will include the Allison V-Drive, HD 740, World Transmission, and the 1000 and 2000 Series Transmissions. (DEMR 1421)

DEMR 55010  Electronic Diesel Injector Basics  1.2 Credits
Covers the fuel injector removal and replacement procedures for Detroit 60 and Cummins Celect engines.

DEMR 55011  Preventative Maintenance  4.8 Credits
No Prerequisite. Textbook Required. This is an introductory course designed to provide the student with basic knowledge of proper servicing practices. Content includes record keeping and condition of major systems. (DEMR 1229)

DEMR 55012  Diesel Engine Testing and Repair II  9.6 Credits
Prerequisite(s): Reading Level 4. Textbook Required. This course is a continuation of Diesel Engine Testing and Repair I. It includes coverage of testing and repairing diesel engines including related systems and specialized tools. (DEMR 2412)
**FDNS 1168 Practicum - Dietetics/Dietitian (RD) 1 Credit (0 Lec, 10 Lab)**
This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student.
Co-requisite(s): DITA 1400
Course Type: Technical

**FDNS 1169 Practicum-Dietetics/Dietitian (RD) 1 Credit (0 Lec, 10 Lab)**
This course provides practical, general workplace training supported by an individualized learning plan developed by employer, the College and student.
Co-requisite(s): DITA 1401
Course Type: Technical

**FDNS 1309 Nutrition in the Community 3 Credits (3 Lec, 0 Lab)**
This is a study of the nutritional status of populations at the national, state, and local community levels. It includes socioeconomic cultural and psychological influences on eating behavior, national and state health objectives, marketing strategies for objective implementation, and community nutrition program serving risk-group populations. Basic teaching/counseling methods for the nutrition education of small groups and individual clients/patients is also covered.
Course Type: Technical

**FDNS 1460 Clin Dietetics/Human Nutr Svc 4 Credits**
Course Type: Technical

**FDNS 55000 Practicum - Dietetics/Dietitian (RD) 11.2 Credits**
This course provides practical general workplace training supported by an individualized plan developed by employer, the College and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. The course may be repeated if topics and learning outcomes vary. (FDNS 1168)
HECO 1322  Nutrition and Diet Therapy  3 Credits  (3 Lec, 0 Lab)
This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed.
Course Type: Academic
DITETETICS (DITA)

DITA 1400 Dietary Manager I 4 Credits (4 Lec, 0 Lab)
This course is preparation for supervisory roles in food service departments. Emphasis on normal and therapeutic nutrition and food service systems management. Major topics include dietary and meal planning guidelines, sources and functions of nutrients, diet therapy, nutritional assessment and care, food production management and purchasing, and regulatory agencies.
Co-requisite(s): FDNS 1168
Course Type: Technical

DITA 1401 Dietary Manager II 4 Credits (4 Lec, 0 Lab)
This course is a continuation of Dietary Manager I which emphasizes food service sanitation and safety, administrative and personnel management. Major topics include regulatory agencies, computer applications, production management, budgeting and cost control, personnel management, quality assurance, leadership skills, human relations, and communications. Program director approval required.
Co-requisite(s): FDNS 1169
Course Type: Technical
DRAMA (DRAM)

DRAM 1120 Theatre Practicum I 1 Credit  (0 Lec, 4 Lab)
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Course may be taken a maximum of four times for credit. This course is open to all students interested in the theater. Credit is earned for acting, technical work, or other participation.
Course Type: Academic

DRAM 1121 Theatre Practicum II 1 Credit  (0 Lec, 4 Lab)
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. This course is open to all students interested in the theater. Credit is earned for acting, technical work, or other participation.
Course Type: Academic

DRAM 1310 Introduction to Theatre 3 Credits  (3 Lec, 0 Lab)
This is an introduction to the basic practices, history, theories and styles of the theatre, and includes a survey of major fields of theatrical art. Elementary stage techniques are studied along with fundamental acting techniques.
Course Type: Academic

DRAM 1322 Stage Movement 3 Credits  (3 Lec, 0 Lab)
This course covers principles, practices, and exercises in body techniques and stage movement; emphasis on character movement and body control.
Course Type: Academic

DRAM 1330 Stagecraft I 3 Credits  (3 Lec, 0 Lab)
This is an introduction to the theory and practical applications of theatre lighting, set design and construction techniques. Students are provided the opportunity to participate in actual production situations as members of stage crews. Workshop hours will be scheduled as required.
Course Type: Academic

DRAM 1341 Stage Makeup 3 Credits  (3 Lec, 0 Lab)
This course will instruct the student actor in the theory and practice of stage makeup, encompassing all forms of corrective and character application. Enrollment is open to all students without prerequisite.
Course Type: Academic

DRAM 1342 Introduction to Costuming 3 Credits  (2 Lec, 2 Lab)
Costuming will focus on the design and building of stage costumes for production. Students will learn to sketch costume designs and will be responsible for a full costume plot for a production. Students will also learn to sew and construct costumes as well as work within a given costuming budget.
Course Type: Academic

DRAM 1351 Acting I 3 Credits  (3 Lec, 0 Lab)
This is introduction to the basic skills and techniques of acting, with character analysis and development. It includes characterization and lab work in scenes from great dramatic literature. Rehearsal will be scheduled as required.
Course Type: Academic

DRAM 1352 Acting II 3 Credits  (3 Lec, 0 Lab)
This is a continuation and consolidation of the gains made in DRAM 1351. Rehearsal will be scheduled as required.
Course Type: Academic

DRAM 2120 Theatre Practicum III 1 Credit  (0 Lec, 4 Lab)
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. This course is open to all students interested in theater. Credit is earned for acting, technical work, or other participation.
Course Type: Academic

DRAM 2121 Theatre Practicum IV 1 Credit  (0 Lec, 4 Lab)
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. This course is open to all students interested in the theater. Credit is earned for acting, technical work, or other participation.
Course Type: Academic

DRAM 2331 Stagecraft II 3 Credits  (3 Lec, 0 Lab)
This is an advanced study of the theory and practical applications of theatre lighting, set design, construction techniques, and stage sound. Students are provided the opportunity to participate in actual production situations as members of stage crews. Workshop hours will be scheduled as required.
Course Type: Academic

DRAM 2336 Voice for the Theatre 3 Credits  (3 Lec, 0 Lab)
This course is an application of the performer's use of the voice as a creative instrument of effective communication. It encourages an awareness of the need for vocal proficiency and employs techniques designed to improve the performer's speaking abilities. Course may include the study of I.P.A. and stage dialects.
Prerequisite(s): Reading level 6
Course Type: Academic

DRAM 2351 Acting III 3 Credits  (3 Lec, 2 Lab)
This course includes the development of basic skills and techniques of acting for the purpose of exploring performance and its relationship to various acting environments. Emphasis is placed on acting choices that affect character and script analysis in regards to acting for the camera. A comparative study of stage acting vs. acting for the camera, using interdisciplinary approach of art, music, philosophy, and theater is included. Emphasis is also placed on methods of relaxation, communication, and the cybernetic approach to film/video acting.
Course Type: Academic

DRAM 2366 Introduction to Cinema: Film Appreciation I 3 Credits  (2 Lec, 2 Lab)
This course includes a comparative study of the different genres of motion pictures, with an emphasis on the evaluation and appreciation of the motion picture structure within each genre. Film production, acting, writing, and special effects will be discussed. Full length movies will be watched in their entirety during a two-hour lab. Visual, oral, and written evaluations of each movie are required.
Course Type: Academic

DRAM 19001 Intro to Motion Picture Arts 0 Credits
ECONOMICS (ECON)

ECON 1301 Introduction to Economics  3 Credits  (3 Lec, 0 Lab)
This course is a study of consumer problems of the individual and of the family in the American economy. Areas of study may include: money and credit management, saving and personal investment, estate planning, wills, buying food and clothing, home ownership or rental, transportation, insurance, taxes and consumer protection. It is designed to expose non-business majors to a broad range of economic issues and policies. It may not be taken for credit toward any degree plan for Business Administration, Accounting, Finance, Economics.
Prerequisite(s): Reading level 6, Writing level 6 and Math level 6
Course Type: Academic

ECON 2301 Principles of Macroeconomics  3 Credits  (3 Lec, 0 Lab)
This course covers an analysis of the economy as a whole including measurement and determination of national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, fiscal policy, and monetary policy.
Prerequisite(s): Reading level 7, Writing level 7 and Math level 8
Course Type: Academic

ECON 2302 Principles of Microeconomics  3 Credits  (3 Lec, 0 Lab)
This is an analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Academic
EDUCATION (EDUC)

EDUC 1200 Pathways for Learning 2 Credits (2 Lec, 0 Lab)
This course is a study of research and theory in the psychology of learning, cognition, and motivation; factors that impact learning, and application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Academic

EDUC 1300 Learning Framework 3 Credits (3 Lec, 0 Lab)
The purpose of EDUC 1300/PSYC 1300 is to enable you to develop effective academic behaviors for college success. The course includes a balance between the research and theory in the psychology of learning, cognition, and motivation and how to apply what you learn to becoming successful in a college setting. You will understand the factors that affect learning and how to apply what you learn to the development of successful learning strategies. You will use assessment instruments, such as learning inventories, to help you identify your own strengths and weaknesses as a strategic learner. You are ultimately expected to integrate and apply the learning skills discussed across your own academic courses and program and become an effective and efficient learner. As you develop these skills, you should be able to continually draw from the theoretical models and apply this to your courses and to your life.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

EDUC 1301 Introduction to the Teaching Profession 3 Credits (3 Lec, 1 Lab)
This is an enriched, integrated pre-service course and content experience that provides active recruitment and institutional support of students interested in a teaching career, especially in high need fields. It provides opportunities to participate in early field observations at all levels of P-12 schools with varied and diverse student populations. This course provides support from college and school faculty preferably in small cohort groups, for the purpose of introduction to and analysis of the culture of schooling and classrooms. The course will be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Students will complete 16 contact hours of field experience in P-12 classrooms.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

EDUC 19001 Teaching Online Successfu-Onl 0.8 Credits

EDUC 2301 Introduction to Special Populations 3 Credits (3 Lec, 1 Lab)
This is an enriched, integrated pre-service course and content experience that provides an overview of schooling and classrooms from the perspectives of language, gender, socioeconomic status, ethnic and academic diversity, and equity with an emphasis on factors that facilitate learning. Students will be provided with opportunities to participate in early field observations of P-12 special populations. The course will be aligned as applicable with State Board for Educator Certification Pedagogy and Professional Responsibilities standards. Students will complete 16 contact hours of field experience with P-12 special populations.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic
ELPT 1215 Electrical Calculations I 2 Credits (2 Lec, 0 Lab)
This is an introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, unit conversions, and applied geometry. Electrical calculations to solve DC and AC electrical circuits are included.
Course Type: Technical

ELPT 1311 Basic Electrical Theory 3 Credits (2 Lec, 2 Lab)
This course covers the basic theory and practice of electrical circuits. It includes calculations as applied to alternating and direct current, and covers electrical terminology, circuit analysis and mathematical formulas as applied to direct and alternating current circuits.
Course Type: Technical

ELPT 1325 National Electric Code I 3 Credits (3 Lec, 0 Lab)
This is an introductory study of the National Electric Code (NEC) for those employed in the field requiring knowledge of the Code. Emphasis will be on wiring design, protection, methods, and materials; and equipment for general use, and basic calculations.
Course Type: Technical

ELPT 1341 Motor Control 3 Credits (2 Lec, 2 Lab)
This course covers operating principles of solid-state and conventional controls along with their practical applications. Topics for this course will include braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretation.
Prerequisite(s): CETT 1302
Course Type: Technical

ELPT 1345 Commercial Wiring 3 Credits (2 Lec, 2 Lab)
This course provides instructions in commercial wiring methods. It includes overcurrent protection, raceway panel board installation, proper grounding techniques, and associated safety procedures. The National Electrical Code (NEC) is used to size branch circuits, feeders, service equipment, outlet and junction boxes, and conduit; and installation of lighting and utilization of equipment. Students gain experience in safe workplace practices, the proper use of hand tools and ladders, interpreting blueprints and specifications, bending and installation of conduit, installation of armored cable, and wiring of devices, load centers and service equipment.
Course Type: Technical

ELPT 1351 Electrical Machines 3 Credits (2 Lec, 2 Lab)
This is a study of direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis will be on construction, characteristics, efficiencies, starting, and speed control.
Prerequisite(s): CETT 1302 or ELPT 1311
Course Type: Technical

ELPT 1357 Industrial Wiring 3 Credits (2 Lec, 2 Lab)
This course covers wiring methods used for industrial installations. It includes motor circuits, raceway and bus way installations, proper grounding techniques, and associated safety procedures.
Course Type: Technical

ELPT 1429 Residential Wiring 4 Credits (3 Lec, 3 Lab)
This is a study of wiring methods for single family and multi-family dwellings that includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures.
Course Type: Technical

ELPT 1440 Master Electrician Exam Review I 4 Credits (4 Lec, 0 Lab)
This is an introductory study of electrical theory, code calculations, and interpretations applicable to becoming a master electrician. It emphasizes residential, commercial, and industrial installations using the current edition of the National Electrical Code (NEC) and local ordinances. Prerequisite or Co-requisite(s): ELPT 2325 or approval of department chair
Course Type: Technical

ELPT 1441 Motor Control 4 Credits (3 Lec, 3 Lab)
This course focuses on the operation of single- and three-phase motors and transformers. It includes transformer banking, power factor correction, and protective devices. Also included are lessons on three-phase power concepts, transformer and motor connections, transformer and motor metering, and transformer and motor troubleshooting theory.
Prerequisite(s): CETT 1302 or ELPT 1311 or approval of the department chair
Course Type: Technical

ELPT 2215 Electrical Calculations II 2 Credits (2 Lec, 0 Lab)
This is a study of operating principles dealing with solid-state and conventional controls along with their practical applications. The course includes braking, jogging, plugging, safety interlocks, wiring, and schematic diagram interpretations.
Prerequisite(s): CETT 1302 or ELPT 1311 or approval of department chair
Course Type: Technical

ELPT 2301 Journeyman Electrician Exam Review 3 Credits (3 Lec, 0 Lab)
This course provides preparation for journeyman electricians with emphasis on calculations and the National Electrical Code (NEC). Special attention is directed toward test taking skills and practice exams as they apply to the local area journeyman exams.
Prerequisite(s): ELPT 2325 or approval of department chair
Course Type: Technical

ELPT 2305 Transformers and Motors 3 Credits (3 Lec, 1 Lab)
This course focuses on the operation of single-phase and three-phase motors and transformers. It includes transformer banking, power factor correction, and protective devices. Also included are lessons on three-phase power concepts, transformer and motor connections, transformer and motor metering, and transformer and motor troubleshooting theory.
Prerequisite(s): CETT 1302 or ELPT 1311 or approval of the department chair
Course Type: Technical
ELPT 2319  Programmable Logic Controllers I  3 Credits  (2 Lec, 2 Lab)
This course covers the fundamental concepts of programmable logic controllers, principles of operation, and numbering systems as applied to electrical controls. It includes history, terminology, typical applications, hardware and software, and incorporates lab and project activities that address operating, monitoring programming, troubleshooting, and repairs of PLC controlled lab trainers as well as actual industrial equipment.
Course Type: Technical

ELPT 2325  National Electrical Code II  3 Credits  (3 Lec, 0 Lab)
This course includes in-depth coverage of the National Electrical Code (NEC) for those employed in fields requiring knowledge of the Code, with an emphasis on wiring protection and methods, special conditions, and advanced calculations.
Prerequisite(s): ELPT 1325 or department chair approval
Course Type: Technical

ELPT 2339  Electrical Power Distribution  3 Credits  (3 Lec, 1 Lab)
This is a study of design, operation, and technical details of modern power distribution systems including generating equipment, transmission lines, plant distribution, and protective devices. Includes calculations of fault current, system load analysis, rates, and power economics.
Prerequisite(s): CETT 1302 or ELPT 3111, ELPT 2305
Course Type: Technical

ELPT 2343  Electrical System Design  3 Credits  (3 Lec, 0 Lab)
This is a course in electrical design of commercial and/or industrial projects, including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC).
Prerequisite(s): ELPT 2325 or approval of department chair
Course Type: Technical

ELPT 2364  Practicum-Electrical and Power Transmission Installation/Installer, General  3 Credits  (0 Lec, 21 Lab)
This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. The course may be repeated if topics and learning outcomes vary.
Prerequisite(s): Approval of department chair
Course Type: Technical

ELPT 2449  Industrial Automation  4 Credits  (3 Lec, 3 Lab)
This is an advanced study of electrical control systems, applications, and interfacing utilized in industrial automation. Ladder logic diagramming and programmable logic controllers are covered as they apply to electrical controls.
Prerequisite(s): ELPT 1441
Course Type: Technical

ELPT 19002  Elec Planning & Estimating  4.8 Credits
ELPT 41000  Basic Electrical Wiring  1.6-12.8 Credits
ELPT 41001  Electrical Code  1.6-12.8 Credits
ELPT 41011  Basic Electrical Theory  4.8-16 Credits
ELPT 41015  Electrical Calculations I  3.2-6.4 Credits
ELPT 41019  Fundamentals of Electricity I  4.8-16 Credits
ELPT 41020  Fundamentals of Electricity II  4.8-16 Credits
ELPT 41021  Introduction to Electrical Saf  4.8-14.4 Credits
ELPT 41025  National Electrical Code I  3.2-14.4 Credits
ELPT 41029  Residential Wiring  6.4-16 Credits
ELPT 41031  Survey of the National Electri  3.2-14.4 Credits
ELPT 41041  Motor Control  6.4-16 Credits
ELPT 41045  Commercial Wiring  6.4-16 Credits
ELPT 41049  Electrical Blueprint Reading  3.2-14.4 Credits
ELPT 41051  Electrical Machines  4.8-16 Credits
ELPT 41055  Electronics for Electricians  6.4-16 Credits
ELPT 41057  Industrial Wiring  6.4-16 Credits
ELPT 41091  Special Topics in Electrical a  0.7-11.2 Credits
ELPT 41092  Special Topics in Electrician  0.7-11.2 Credits
ELPT 42000  Texas Elect License Renewal  0.4 Credits
ELPT 42001  Journeymen Electrician Exam Re  3.2-4.8 Credits
ELPT 42005  Motors and Transformers  4.8-16 Credits
ELPT 42015  Electrical Calculations II  3.2-6.4 Credits
ELPT 42019  Programmable Logic Controllers  4.8-16 Credits
ELPT 42023  Transformers  4.8-16 Credits
ELPT 42025  National Electrical Code II  3.2-4.8 Credits
ELPT 42031  AC/DC Drives  4.8-14.4 Credits
ELPT 42035  Electrical Theory and Devices  3.2-14.4 Credits
ELPT 42037  Electrical Planning and Estima  4.8-16 Credits
ELPT 42039  Electrical Power Distribution  4.8-14.4 Credits
ELPT 42043  Electrical Systems Design  4.8-16 Credits
ELPT 42047  Electrical Testing and Mainten  6.4-16 Credits
ELPT 42049  Industrial Automation  4.8-16 Credits
ELPT 42050  Maintenance Electrician Exam R  4.8-16 Credits
ELPT 42051  Master Electrician Exam Review  4.8-16 Credits
ELPT 42052  Master Electrician Exam Review  4.8-16 Credits
ELPT 42055  Programmable Logic Controllers  3.2-14.4 Credits
ELPT 55000  Electrical Refresher  3.2 Credits
ELPT 55001  Texas Electrician License Renewal  0.4 Credits
Identify recent changes to the National Electrical Code; identify the most commonly used Tables in the National Electrical Code; list rules and regulations applicable to electrical licenses; and discuss how new code changes will affect work situations.

ELPT 55002  Electrical Estimating Software  4 Credits
An in-depth study of electrical estimating: covering take-offs, labor units, and the use of computer take-off software.
ELPT 55003 Master Electrician Exam Review I 6.4 Credits
Prerequisite(s): ELPT 2325 or approval of department chair. Textbook required. An introductory study of electrical theory, code calculations, and interpretations applicable to becoming a master electrician. Emphasis on residential, commercial, and industrial installations using the current edition of the National Electric Code (NEC) and local ordinances. (ELPT 1440)

ELPT 55004 Electrical-Beginning 6.75 Credits
An introduction to basic direct current (DC) theory including electron theory and direct current applications.

ELPT 55005 Electrical-Beginning 5.85 Credits
An introduction to basic direct current (DC) theory including electron theory and direct current applications.

ELPT 55006 Electrical-Intermediate 7.8 Credits
Introduces alternating current (AC). Includes AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors.

ELPT 55007 Basic Electrical Theory 6.4 Credits
No Prerequisite. Textbook Required. This course covers the basic theory and practice of electrical circuits. It includes calculations as applied to alternating and direct current, and covers electrical terminology, circuit analysis and mathematical formulas as applied to direct and alternating current circuits. (ELPT 1311)

ELPT 55008 Commercial Wiring 6.4 Credits
Prerequisite(s): None Note: Textbook Required This course provides instructions in commercial wiring methods. It includes overcurrent protection, raceway panel board installation, proper grounding techniques, and associated safety procedures. The National Electrical Code (NEC) is used to size branch circuits, feeders, service equipment, outlet and junction boxes, and conduit; and installation of lighting and utilization of equipment. Students gain experience in safe workplace practices, the proper use of hand tools and ladders, interpreting blueprints and specifications, bending and installation of conduit, installation of armored cable, and wiring of devices, load centers and service equipment. (ELPT 1345)

ELPT 55009 Electrical Calculations I 3.2 Credits
Prerequisite(s): None. Textbook Required. Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, metric conversion, and applied geometry. Electrical calculations to solve DC and AC electrical circuits are included. (ELPT 1215)

ELPT 55010 Electronics Applications 6.4 Credits
Prerequisite(s): ELPT 1311. Textbook Required. This course is a study of electronic principles and the use of electronic devices. Electronic devices include diodes, transistors, and rectifiers. Also included are zener diodes, light emitting diodes, silicon controlled rectifiers, (SCR’s), diacs, triacs, and supplies. (ELPT 1355)

ELPT 55011 Motor Controls 9.6 Credits
Prerequisite(s): ELPT 1311 or approval of department chair. Textbook is required. A study of operating principles dealing with solid-state and conventional controls along with their practical applications. Includes braking, jogging, plugging, safety wiring, ladder diagrams, relay logic and timers. (ELPT 1441)

ELPT 55012 Motors & Transformers 6.4 Credits
This course focuses on motors and transformers operation of single and three-phase motors and transformers. It includes transformer banking, power factor correction and protective devices. Also included are three-phase power concepts, transformer and motor connections, transformer and motor metering. (ELPT 2405)

ELPT 55013 National Electric Code I 4.8 Credits
Prerequisite(s): None Note: Textbook is required. An introductory study of the National Electric Code (NEC). Emphasis will be on wiring design, protection, methods and materials; equipment for general use and basic calculations. (ELPT 1325)

ELPT 55014 National Electric Code II 4.8 Credits
Prerequisite(s): ELPT 1325 or department chair approval. Note: Textbook is required. This course includes in-depth coverage of the National Electrical Code (NEC) for those employed in the fields requiring knowledge of the Code, with an emphasis on wiring protection and methods, special conditions and advanced calculations.

ELPT 55015 Residential Wiring 9.6 Credits
Note: Textbook is required. This course focuses on wiring methods for single family and multi-family dwellings. It includes load calculations, service entrance sizing, proper grounding techniques and associated safety procedures. (ELPT 1429)

ELPT 55016 Electrical Systems Design 4.8 Credits
Prerequisite(s): ELPT 2325 or approval of department chair. This is a course in electrical design of commercial and/or industrial projects, including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC). (ELPT 2343)

ELPT 55017 Electrical Calculations II 3.2 Credits
Prerequisite(s): ELPT 1215 or approval by department chair. Textbook Required. This is the further study of mathematical applications used to solve problems in the electrical field. The course includes fractions, decimals, ratio and proportion, applied geometry, and utilization of right triangles to calculate electrical values. It also includes power factor correction, fault currents, neutral currents, conductor ampacity, and other advanced calculations. (ELPT 2215)

ELPT 55018 Electrical Systems Design 4.8 Credits
Prerequisite(s): ELPT 2325 or approval by department chair. Textbook Required. This is a course in electrical design of commercial and/or industrial projects, including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC). (ELPT 2343)

ELPT 55019 Journeyman Electrician Exam Review 4.8 Credits
Prerequisite(s): ELPT 2325 or approval by department chair. Textbook Required. Preparation for journeyman electrician licensure with emphasis on calculations, and the National Electrical Code (NEC). Special attention is directed toward test taking skills, and practice exams as they apply to the state journeyman exam. (ELPT 2301)

ELPT 55020 Electrical Machines 6.4 Credits
Prerequisite(s): ELPT 1311. Textbook is required. This is a study of direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators and alternators. Emphasis will be on construction, characteristics, efficiencies, starting and speed control. (ELPT 1351)
ELPT 55021 Industrial Wiring 6.4 Credits
Prerequisite(s): None Note: Textbook is required. This course covers wiring methods used for industrial installations. It includes motor circuits, raceway and busway installations, proper grounding techniques and associated safety procedures. (ELPT 1357)

ELPT 55022 Electrical Planning & Estimating 6.4 Credits
Prerequisite(s): ELPT 2325 or approval by department chair. Note: Textbook is required. This course covers planning and estimating for residential, commercial and industrial wiring systems. Statistical procedures of various methods of estimating are introduced along with a variety of electrical techniques. (ELPT 2337)

ELPT 55023 High Voltage Electrical Safe Work Practices 1.6 Credits
Provides trainees with an in-depth understanding of the requirements of NFPA 70E and Arc Flash calculations.

ELPT 55024 Electrical Print Reading 0.7 Credits
Students will be able to identify terms and devices used in electrical circuits and controls; read and interpret schematic diagrams using industrial switches, pilot devices, control relays, and timers.

ELPT 55025 PLC Programming 4 Credits

ELPT 55026 Programmable Logic Controllers I 6.4 Credits
Prerequisite(s): None Note: Textbook Required. Fundamental concepts of programmable logic controllers, principles of operation, and numbering systems as applied to electrical controls. It includes history, terminology, typical applications, hardware and software, and incorporates lab and project activities that address operating, monitoring, programming, troubleshooting, and repairs of PLC controlled lab trainers as well as actual industrial equipment. (ELPT 2319)

ELPT 55027 Introduction to Programmable Logic Controllers 4 Credits
Note: Textbook is required. This course focuses on basic hardware and software applications for industrial Programmable Logic Controllers (PLC). Includes power supplies, discrete Input/Output (IO) modules, programming devices, processors, basic logic elements, timers and counters. This course includes labs and introduction to troubleshooting.

ELPT 55028 Basic Electrical Training for Non-Electricians 1.6 Credits
General principles of electrical controls and their components in the electrical power industry. Includes reading electrical diagrams and identifying industrial switches and pilot devices. Introduction to hardwiring and troubleshooting of industrial control relays and timers.

ELPT 55029 Electrical Exam Preparation 3.6 Credits
Prerequisite(s): None. Textbook Required. This course includes minimum requirements for approval of electrical installation specified by the National Electrical Code (NEC). Examination of all aspects of electrical installation from the standpoint of safety for personnel and equipment. Students will learn to locate and interpret the articles and sections in the NEC that pertain to electrical installation; and calculate conductors, overcurrent protection, and service equipment as applied to building services.

ELPT 55030 Electrical Code Study, Article 430, 440, & 450 3.6 Credits
Prerequisite(s): None Note: Textbook required This course is designed for electricians to gain skills and knowledge about the Code and practice application. The course covers the Article 430, Motors, Article 440, Air Conditioning, Article 450, Transformers, Code calculations, and Code interpretations. It emphasizes installations using the current edition of the National Electric code (NEC) and local ordinances.

ELPT 55031 Electrical Calculations Study 3.6 Credits
Prerequisite(s): None Note: Textbook required This course is designed for the study of mathematical applications to solve problems in Ohms Law, resistors, inductors, capacitors, and power right triangle application, calculation electrical values, short circuits, fault currents, and power factor corrections. This will include Electrical Theory; small Code calculations, and interpretations applicable to becoming a Maintenance, Residential, and Journeyman Electrician.

ELPT 55032 Electrical Calculations Study 3.6 Credits
Prerequisite(s): None Note: Textbook required This course is designed for the study of mathematical applications to solve problems in Ohms Law, resistors, inductors, capacitors, and power right triangle application, calculation electrical values, short circuits, fault currents, and power factor corrections. This will include Electrical Theory; small Code calculations, and interpretations applicable to becoming a Maintenance, Residential, and Journeyman Electrician.

ELPT 55033 NCCER Electrical Level 2 12 Credits
Prerequisite(s): NCCER Electrical Level 1. Note: Personal protective equipment to be purchased at student's expense. Electricians install electrical systems in structures. They install wiring and other electrical components, such as circuit breaker panels, switches and light fixtures. They also learn to follow blueprints and learn about the National Electrical Code and state and local codes. This course will prepare trainees for careers in the electrical field. NCCER offers a comprehensive, four-level electrical curriculum.

ELPT 55034 Motor Control 0.8 Credits
Learn to identify proper motor operation; identify components and their function; define key terms; identify alternating current (AC) motors and their characteristics, motor controls, motors and transformers, National Electric Code 1 and 2.

ELPT 55035 Introduction to Electrical Planning and Estimation 0.8 Credits
This course is an introduction to the planning and estimation of electrical systems.

ELPT 55036 NCCER Electrical Level 2B 8 Credits
Prerequisite(s): NCCER Electrical Level 1 and 2A. Note: Textbook Required. PPE to be purchased at students expense. Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code and state and local codes. To prepare trainees a career in the electrical field, NCCER offers a comprehensive, 4-level Electrical curriculum.

ELPT 55037 High Voltage Electrical Safe Work Practices - 8hr 0.8 Credits
Prerequisite(s): None Note: Textbook required Provides trainees with an in-depth understanding of the requirements of NFPA 70E and Arc Flash calculations.

ELPT 55038 NCCER Electrical Level 3 12 Credits
Prerequisite(s): NCCER Electrical Level 2 Note: Personal protective equipment to be purchased at student's expense. Electricians install electrical systems in structures. They install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures. They also learn to follow blueprints and learn about the National Electrical Code and state and local codes. This course will prepare trainees for a career in the electrical field. NCCER offers a comprehensive, four-level electrical curriculum.

ELPT 55039 NCCER Electrical Level 4 12 Credits
Prerequisite(s): NCCER Electrical Level 3 Note: Personal protective equipment to be purchased at student's expense. This course prepares the trainee for certification in Level 4 NCCER Electrical.
ELPT 55040 Motors, Controllers, and Drivers 3.2 Credits
Note: Materials provided General Principles of electrical controls and their components in the electrical power industry. Includes reading electrical diagrams and identifying industrial switched and pilot devices. Introduction to hardwiring and troubleshooting of industrial control relay and timers.

ELPT 55041 ARC Flash/ High Voltage 1.6 Credits
Prerequisite(s): None This course provides trainees with an in-depth understanding of the requirements of NFPA 70E and ARC Flash calculations.

ELPT 55042 Introduction to PLCs- Allen Bradley 4 Credits
Prerequisite(s): None Note: Materials provided This course introduces the Allen Bradley RS Logic 500/5000 Programmable Logic Controller (PLC). It will demonstrate how PLCs fit into process automation. This course addresses the application, operation, programming and troubleshooting of the Allen Bradley PLC. This hands on course will teach the student to design control diagrams based upon requirements. Then the student will connect the input and output devices. Finally you will learn to use program design techniques to create simple ladder logic programs. Upon completion of this course the student will be able to describe the functions of all of the components of an Allen Bradley PLC 5 and SLC 500 and tag-based Logix PLC system; describe the difference between PLCs and PCs; contrast PLC ladder logic and relay ladder logic; interface basic hardware configurations to the PLC including power supplies, discrete Input/output (IO) modules, programming devices, processors, basic logic elements, timers, and counters; identify and describe various manually and mechanically operated switches; and identify and describe solenoids, relays, contactors, motor starters, lamps and alarms.

ELPT 55043 Introduction to PLCs- Siemens 4 Credits
Prerequisite(s): None Note: Materials provided This course provides theory of Siemens programmable controllers including hardware, timers, counters data manipulation and troubleshooting. The course covers quickly diagnose problems using PLC software, how to connect to a processor that is online, make minor changes in the program to get the machine running, how to test new ideas and new components. Upon completion of this course, students will be able to install software and the modification of a program interface; explanation of what a PLC is and how it works; structure and operation of a PLC SIMATIC S7-300; compilation of an example program; and loading and debugging of an example program.

ELPT 55044 Programmable Logic Controllers - Intermediate 6.4 Credits
Prerequisite(s): Introduction to Programmable Logic Controllers Note: Textbook required This course is designed to be taken after successful completion of the Introduction to Programmable Logic Controllers course. Each trainee will write and interpret PLC ladder logic programs while troubleshooting and continuing to practice different programming techniques. This class provides a more advanced foundation to PLC's in manufacturing, and includes PLCLogix500 while using the lab simulator for RSLogix 500 and SLC 500 series PLC software. Trainees will use MicroLogix 1000 PLC's to control a conveyor belt while applying RSLinx 500 software. The course will also include troubleshooting and software development with a CompactLogix PLC applying RSLogix 5000 software.

ELPT 55045 TDLR Electrical Master's Exam Review 1.6 Credits
Prerequisite(s): 12,000 hours of on the job training. Applicants need a letter of time or the form provided by the TDLR signed by the master of record for the company to sign off. Note: Required course materials are not included and should be purchased before the class begins. Student will need: Personal copies of the latest National Electrical Code, Ugly’s book and non programmable calculator. This two day work shop is designed to teach basic techniques to help pass the Texas Department of Licensing and Regulation’s Master’s Exam. Required course materials are not included and should be purchased before the class begins.

ELPT 55046 TDLR Electrical Journeyman’s Exam Review 1.6 Credits
Prerequisite(s): 8,000 Hours of On the Job Training. Applicants need a letter of time or the form provided by the TDLR signed by the master of record for the company to sign off. Note: Required course materials are not included and should be purchased before the class begins. This two-day workshop is designed to teach basic techniques to help pass the Texas Department of Licensing and Regulation’s Journeyman Exam. Required course materials are not included and should be purchased before the class begins.

ELPT 55047 Grounding and Bonding of Electrical Systems 1.6 Credits
The course covers fundamentals of grounding and bonding, when to ground, grounding of electrical systems, grounding electrical services, service equipment and main bonding jumpers, grounding electrodes and an electrode system, grounding electrode conductors, enclosure and equipment grounding, clearing ground faults and short circuits, grounding separately derived systems, grounding at (feeder supplied) separate structures, ground-fault circuit-interrupter protection, ground-fault protection for equipment, grounding and bonding for special locations, low-voltage and intersystem grounding and bonding, grounding and bonding for over 600-volt systems, tables and examples and basic discussion of a power-quality system.

ELPT 55048 PLCs AB/Siemens 1.6 Credits
This course follows an introductory course to PLC Allen Bradley or PLC Siemens and describes the differences in the two PLCs.
**ELECTRICAL TECHNOLOGY (ENER)**

**ENER 1240 Employee Success in Energy Industry**  
2 Credits  (2 Lec, 0 Lab)

This course is a study of successful employee characteristics and employer expectations in the energy industry. Topics include benefits, career management, e-communications, and personal financial management. It also addresses values, inclusion, and community/environmental roles.

Prerequisite(s): Reading level 6, Writing level 6, Math level 6

Course Type: Technical

**ENER 1330 Basic Mechanical Skills for Energy**  
3 Credits  (2 Lec, 2 Lab)

This course covers basic mechanical skills using hand and power tools in an industrial environment. Topics include tool use and maintenance, lubrication, measuring, threads and fasteners, bench works, basic mechanical drawings, and basic shop calculations (English and metric). Also, addresses rigging procedures to include chain falls, jacks, cable, fulcrum, port-a-power, and come-alongs.

Course Type: Technical
RBPT 2345  Onsite Power Generation and Renewable Energy  3 Credits
(2 Lec, 2 Lab)
This course is a study of the application of residential onsite power
generation with an emphasis on renewable energy. Includes systems that
produce electrical energy and thermal energy. Also covers determination
of residential energy loads and their comparison to onsite power
generation and an exploration of off-grid, on-grid, net-zero, and distributed
applications.
Course Type: Technical
CETT 1302  Electricity Principles  3 Credits  (2 Lec, 2 Lab)
This course covers principles of electricity including proper use of test equipment, A/C and D/C circuits, and component theory and operations.  Prerequisite(s): Reading level 6, Writing level 6, Math level 6  
Course Type: Technical

CETT 1303  DC Circuits  3 Credits  (2 Lec, 2 Lab)
This is a study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws, and circuit analysis techniques. Emphasis is on circuit analysis of resistive networks and DC measurements.  
Course Type: Technical

CETT 1305  AC Circuits  3 Credits  (2 Lec, 2 Lab)
This is a study of the fundamentals of alternating current, including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance.  Prerequisite(s): CETT 1303 or department chair approval

Course Type: Technical

CETT 1325  Digital Fundamentals  3 Credits  (2 Lec, 2 Lab)
This entry level course in digital electronics covers number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic, with an emphasis on circuit logic analysis and troubleshooting digital circuits.  
Course Type: Technical

CETT 1329  Solid State Devices  3 Credits  (2 Lec, 2 Lab)
This course is a study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations.  
Course Type: Technical

CETT 1345  Microprocessor  3 Credits  (2 Lec, 2 Lab)
This introductory course in microprocessor software and hardware focuses on architecture, timing sequence operation, and programming. It also reviews appropriate software diagnostic language and tools.  Prerequisite(s): CETT 1325 or department chair approval

Course Type: Technical

CETT 1349  Digital Systems  3 Credits  (2 Lec, 2 Lab)
This course in electronics covers digital systems. Emphasis is on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital-to-analog circuits, and large-scale integrated circuits.  Prerequisite(s): CETT 1325 or department chair approval

Course Type: Technical

CETT 1357  Linear Integrated Circuits  3 Credits  (2 Lec, 2 Lab)
This is a study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. It focuses on computation, measurements, instrumentation, and active filtering.  Prerequisite(s): CETT 1329 or department chair approval

Course Type: Technical

CETT 1409  DC-AC Circuits  4 Credits  (2 Lec, 6 Lab)
This course is a study of fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchhoff's laws, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques.  
Course Type: Technical

CETT 2449  Research and Project Design  4 Credits  (3 Lec, 3 Lab)
This course focuses on the principles of electrical/ electronics design, encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates.  
Course Type: Technical

CETT 38009  Digital Appls linked w/1215  3.2 Credits
CETT 41002  Electricity Principles  8-14.4 Credits
CETT 41003  DC Circuits  4.8-11.2 Credits
CETT 41005  AC Circuits  4.8-11.2 Credits
CETT 41009  DC-AC Circuits  9.6-17.6 Credits
CETT 41015  Digital Applications  6.4-12.8 Credits
CETT 41021  Electronic Fabrication  4.8-9.6 Credits
CETT 41025  Digital Fundamentals  4.8-14.4 Credits
CETT 41029  Solid State Devices  4.8-11.2 Credits
CETT 41041  Solid State Circuits  4.8-11.2 Credits
CETT 41045  Microprocessor  4.8-14.4 Credits
CETT 41049  Digital Systems  4.8-12.8 Credits
CETT 41053  Basic TV/CRT Systems  4.8-12.8 Credits
CETT 41057  Linear Integrated Circuits  4.8-11.2 Credits
CETT 41091  Special Topics in Computer Eng  0.7-11.2 Credits
CETT 42033  Digital Computer Circuits  6.4-12.8 Credits
CETT 42035  Advanced Microprocessors  4.8-11.2 Credits
CETT 42039  Amplifier Analysis  4.8-9.6 Credits
CETT 42043  Principles of Color Television  6.4-12.8 Credits
CETT 42045  Color Television Repair  6.4-12.8 Credits
CETT 42047  Advanced Color Television Repa  8-12.8 Credits
CETT 42049  Research and Project Design  6.4-17.6 Credits
CETT 49001  Computer Maintenance (H.S.)  0 Credits
CETT 55000  Digital Fundamentals  6.4 Credits
Analyze digital circuits such as combinational logic circuits, clocking and timing circuits, and analog-to-digital and digital-to-analog devices; troubleshoot various digital circuits using schematic diagrams; and solve problems involving binary, octal, decimal, and hexadecimal numbering systems. (CETT 1325)

CETT 55001  DC Circuits  6.4 Credits
Study the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. (CETT 1303)

CETT 55002  AC Circuits  6.4 Credits
A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. (CETT 1305)
CETT 55003  Microprocessor  6.4 Credits
An introductory course in microprocessor software and hardware: architecture, timing sequence, operation, and programming. Discussion of appropriate software diagnostic language and tools. (CETT 1345)

CETT 55004  Research and Project Design  9.6 Credits
Principles of electrical/electronic design, encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates.

CETT 55005  Solid State Devices  6.4 Credits
This course is a study of diodes, transistor characteristics and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. (CETT 1329)

CETT 55006  Linear Integrated Circuits  6.4 Credits
Students will cover the characteristics, operations, testing and feedback techniques for integrated circuits. (CETT 1357)

CETT 55007  Digital Systems  6.4 Credits
Prerequisite(s): CETT 1325 or department chair approval. This course in electronics covers digital systems. Emphasis is on application and troubleshooting digital systems using counters, registers, code converters, multiplexes, analog-to-digital-to-analog circuits, and large-scale integrated circuits. (CETT 1349)

CETT 55008  Electricity Principles  6.4 Credits
Prerequisite(s): Reading level 6, Writing level 6, Math level 6 This course covers principles of electricity including proper use of test equipment, A/C and D/C circuits, and component theory and operation. (CETT 1302)

CETT 55009  NCCER Electrical Level 1  12 Credits
Prerequisite(s): None Note: Includes CORE curriculum. Personal protective equipment to be purchased at student’s expense. This course prepares the trainee for certification in Level 1 NCCER Electrical.

CETT 55010  Hybrid NCCER Industrial Maintenance Electrical and Instrumentation Upskill Course (Turner-Specific)  6 Credits
This is the prerequisite course for those entering the Turner-Specific Instrumentation/Electrical program. Turner has modified its program to begin with Core and certain modules from Electrical Levels 1 and 2 utilizing Contren® Connect as an online textbook and to deliver the lecture portion of the curriculum. Only the practical assessments of the Core curriculum will be provided by the college. Both written and practical assessments of the Electrical modules will be proctored by the college.
ELECTRONICS TECHNOLOGY (EECT)

EECT 1300 Technical Customer Service 3 Credits (3 Lec, 1 Lab)
This course covers general principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills.
Course Type: Technical

EECT 1307 Convergence Technologies 3 Credits (2 Lec, 2 Lab)
This course is a study of telecommunications convergence technologies including telephone, LAN, WAN, wireless, voice, video, and Internet protocol.
Prerequisite(s): Reading level 4
Course Type: Technical

EECT 1340 Telecommunications Transmission Media 3 Credits (2 Lec, 2 Lab)
This course introduces the fundamentals of telecommunications media, including installation, maintenance, and troubleshooting. Topics address media characteristics and connectorization.
Course Type: Technical

EECT 2337 Wireless Telephony Systems 3 Credits (2 Lec, 2 Lab)
This course covers principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol.
Prerequisite(s): ITCC 1301 or ITNW 1325
Course Type: Technical

EECT 2339 Communications Circuits 3 Credits (2 Lec, 2 Lab)
This course is a study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. There is discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers.
Prerequisite(s): CETT 1357 or department chair approval
Course Type: Technical

EECT 2367 Practicum, (Field Experience) Electronic Technology/Technician 3 Credits (0 Lec, 21 Lab)
This course offers practical general training and experience in the workplace. The College, with the employer, develops an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.
Prerequisite(s): CPMT 1345 or department chair approval
Course Type: Technical

EECT 2433 Telephone Systems 4 Credits (4 Lec, 0 Lab)
This is a study of installation and maintenance of systems including telephone sets, public switched networks, local exchanges, networks, two- and four-wire systems. Topics include tip and ringing requirements and digital transmission techniques.
Course Type: Technical

EECT 41000 Technical Customer Service 3.2-6.4 Credits
EECT 41001 Electrical Circuits 3.2-12.8 Credits
EECT 41002 Introduction to Videoconferencing 4.8-9.6 Credits
EECT 41003 Introduction to Telecommunications 4.8-9.6 Credits
EECT 41004 Electronic Soldering 3.2-8 Credits
EECT 41005 Basic Industrial Electricity 3.2-12.8 Credits
EECT 41040 Telecommunications Transmission 6.4-11.2 Credits
EECT 41041 Electric Motors 3.2-12.8 Credits
EECT 41042 Telecommunications Outside Plant 4.8-9.6 Credits
EECT 41044 Telecommunications Broadband Systems 4.8-9.6 Credits
EECT 41046 Telecommunications Traffic Engineering 4.8-9.6 Credits
EECT 41048 Digital Signal Processing (DSP) 4.8-9.6 Credits
EECT 41049 Intermediate Industrial Electricity 3.2-12.8 Credits
EECT 41091 Special Topics in Electrical 0.7-11.2 Credits
EECT 41092 Special Topics in Electronics 0.7-11.2 Credits
EECT 42001 Teleconferencing Applications 4.8-14.4 Credits
EECT 42003 Teleconferencing Systems Design 4.8-14.4 Credits
EECT 42030 Telecommunications Switching 6.4-11.2 Credits
EECT 42032 Telecommunications Signaling 4.8-9.6 Credits
EECT 42033 Telephone Systems 6.4-14.4 Credits
EECT 42035 Telecommunications 9.6-14.4 Credits
EECT 42037 Wireless Telephony Systems 4.8-11.2 Credits
EECT 42039 Communications Circuits 6.4-14.4 Credits
EECT 42040 Telecommunications Technical 6.4-11.2 Credits
EECT 42041 Electronic Controls 3.2-12.8 Credits
EECT 42042 Telecommunications Private Branch Exchange 6.4-11.2 Credits
EECT 42043 Troubleshooting and Maintenance 1.6-12.8 Credits
EECT 42044 Telecommunications Tandem Switching 6.4-11.2 Credits
EECT 42050 Teleconferencing Technology 4.8-14.4 Credits
EECT 55001 Certificate in Convergent Networks Boot Camp - CCNT 10.4 Credits

The CCNT Certificate Program, sponsored by TIA (Telecommunications Industry Association), offers a focused course of study for those interested in pursuing or staying current in a support or technical career within the dynamic field of Telecommunications. Voice and data networks are converging at a rapid pace and IT professionals are increasingly expected to understand both technologies. CCNT is a vendor-neutral, industry-standard, training program sponsored by TIA that gives participants the option to prove their knowledge by passing the associated exams in core Convergent technologies sponsored and endorsed by TIA. Six lecture courses will enable you to understand the concepts and techniques associated with telecom industry standards, will give you insight into Convergent and telephony technologies, and will prepare you to take the associated exams proctored by the IT training Institute to obtain the CCNT professional designation.
EECT 55002 Field System Training 8 Credits
A hands on course in electronic repair and troubleshooting specialized for the field technician. The student would learn how to prepare a component for troubleshooting and repair. They would learn how to perform the assembly and troubleshooting through the construction of three kits we use in DC and AC electronics. They would also learn how to clean and recover equipment that has become immersed and read and trace out circuit schematics. At the end of the course the student should be able to recognize the components used in the system and be able to perform basic troubleshooting tasks.

EECT 55003 Communications Circuits 9.6 Credits
Students will study communication systems, modulation and modulators, and troubleshooting communications systems. (EECT 2439)

EECT 55004 Telecommunications Transmission Media 6.4 Credits
Fundamentals of telecommunications media, including installation, maintenance, and troubleshooting. Topics address media characteristics and connectorization. Fabrication techniques for fiber optic and copper cable networks are addresses along with proper practices for documentation.

EECT 55005 Troubleshooting Electrical Systems and Equipment 3.2 Credits
This course represents a logical approach to troubleshooting electrical power systems.
ELECTRONICS TECHNOLOGY (ELMT)

ELMT 1305 Basic Fluid Power 3 Credits (2 Lec, 2 Lab)
This is a basic fluid power course covering pneumatic and hydraulic systems, fluid power symbols, operating theory, components, and basic electrical and manual controls. Prerequisite(s): Reading level 4

Course Type: Technical

ELMT 2333 Industrial Electronics 3 Credits (2 Lec, 2 Lab)
This is a study of devices, circuits, and systems primarily used in automatic manufacturing and/or process control, including computer controls and interfacing between mechanical, electrical, electronic, and computer equipment. It also presents programming schemes. Prerequisite(s): CETT 1357 or department chair approval

Course Type: Technical

ELMT 2335 Certified Electronics Technician Training 3 Credits (2 Lec, 2 Lab)
This course is a review of electronics concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. Prerequisite(s): Reading level 4

Course Type: Technical

ELMT 2337 Electronic Troubleshooting Service and Repair 3 Credits (2 Lec, 2 Lab)
This course is an In-depth coverage of electronic systems, maintenance, troubleshooting, and repair. Topics include symptom identification, proper repair procedures, repair checkout, and preventative maintenance. Emphasis on safety and use of test equipment. May be offered as a capstone course.

Course Type: Technical

ELMT 2341 Electromechanical Systems 3 Credits (2 Lec, 2 Lab)
This course covers application of electromechanical systems and emphasizes programmable control devices and solid state systems. Prerequisite(s): Reading level 4

Course Type: Technical

ELMT 2351 Power Generation Fundamentals 3 Credits (3 Lec, 1 Lab)
This is a study of electrical power production including identification and function of power plant equipment. Topics include the introduction of power plant operations to include basic power plant cycles, basic power plant systems, boilers, turbines, generators, field devices and instrumentation, control and electrical systems.

Course Type: Technical

ELMT 2453 Power Generation Troubleshooting 4 Credits (3 Lec, 3 Lab)
This course focuses on instruction in the different types of troubleshooting techniques, procedures, and methods used to solve power generation problems. Topics for this course will include application of data collection and analysis, cause-effect relationships, and reasoning. Prerequisite(s): CETT 1302

Course Type: Technical

ELMT 35001 Ind. Elec. (Link w 2333) 9.6 Credits
ELMT 55000 Industrial Electronics 9.6 Credits
Students will cover the devices, circuits and systems used in automated manufacturing. (ELMT 2333)

ELMT 55001 Certified Electronics Technician Training 6 Credits
Students will cover electronic concepts and principles in preparation for the certification exam administered by an outside organization or agency. (ELMT 2335)

ELMT 55002 IAT Electrical 9.6 Credits
Prerequisite(s): None Application of electromechanical systems with emphasis on programmable control devices and solid state systems.

ELMT 55003 Certified Electronics Technician Training 6.4 Credits
Review of electronics concepts and principles in preparation for the certification exam. (ELMT 2335)

ELMT 55004 Troubleshooting Ladder Logic 3.2 Credits
Prerequisite(s): None Note: Materials provided This training course covers a basic rung of logic, RS Logic instruction types, MCR, JSR and basic structure of a PLC program, troubleshooting, adjusting Timers and Counters, integers, binary, floating point data memory areas, symbols (tags) and rung descriptions, searching ladder logic, and understanding scan cycle.

ELMT 55005 Introduction to Vibration Transducers/Transmitters 0.8 Credits
This course is designed to introduce those experienced in working with instrumentation and control loops to vibration sensors. Course includes the principles of operation and incorporation into control loops in the petrochemical industry.
FCEL 1305  Fuel Cell and Alternative/Renewable Energy  3 Credits  (2 Lec, 2 Lab)
This course is on the types and applications of alternative/renewable energy sources. It emphasizes fuel cell applications and processes, reformation of fuels, heat transfer, chemical reaction, power conditioning, combined heat and power, and distributed generation systems.
Prerequisites or Co-requisite(s): CETT 1303 and Reading level 4

Course Type: Technical

FCEL 55000  Fuel Cell and Alternative/Renewable Energy  6.4 Credits
Prerequisites or Co-requisite(s): CETT 1303 and Reading level 4 This course is on the types and applications of alternative/renewable energy sources. It emphasizes fuel cell applications and processes, reformation of fuels, heat transfer, chemical reaction, power conditioning, combined heat and power, and distributed generation systems. (FCEL 1305)
ELECTRONICS TECHNOLOGY (RBTC)

RBTC 1355 Sensors and Automation 3 Credits (2 Lec, 2 Lab)
This course is a study of the basic principles of industrial sensors for automated systems with an emphasis on the operation and application of position, rate, proximity, opto-electronics, ranging, and pressure switches. Prerequisite(s): Reading level 4

Course Type: Technical

RBTC 55000 IAT Robotics 8.8 Credits
Prerequisite(s): None A study of the basic principles of robot controllers, controller input/output, memory, and interfacing with computer integrated manufacturing.

RBTC 55001 Sensors and Automation 6.4 Credits
Prerequisite(s): Reading level 4. This course is a study of the basic principles of industrial sensors for automated systems with an emphasis on the operation and application of position, rate, proximity, opto-electronics, ranging, and pressure switches. (RBTC 1355)

RBTC 55002 Introduction to Pneumatics 1.6 Credits
Introduction to Pneumatics focuses on the fundamentals of Pneumatics and introduces basic concepts, terminology, applications, and automation processes used throughout the pneumatics industry including pneumatic components, signaling and processing elements in a pneumatic system.
EMERGENCY MEDICAL TECH (EMSP)

EMSP 1160 Clinical-Emergency Medical Technician 1 Credit (0 Lec, 6 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Specific detailed learning objectives are developed for the course. Orientation is required prior to the start of the course.
Co-requisite(s): EMSP 1501 and departmental approval.
Course Type: Technical

EMSP 1260 Clinical - Advanced Emergency Medical Technology 2 Credits (0 Lec, 12 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by a clinical professional. Specific detailed learning objectives are developed for the course. Continuous enrollment may be required until these objectives are met. Orientation is required prior to the start of the course. Co-requisites: EMSP 1338, EMSP 1355, EMSP 1356 and departmental approval.
Course Type: Technical

EMSP 1338 Introduction to Advanced Practice 3 Credits (2 Lec, 4 Lab)
This course covers fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. Prerequisite(s): EMSP 1160, EMSP 1501, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404 or departmental approval.
Co-requisite(s): EMSP 1335, EMSP 1355, and EMSP 1260. Reading level 7, Writing level 7 and Math level 8.
Course Type: Technical

EMSP 1355 Trauma Management 3 Credits (2 Lec, 4 Lab)
This is a detailed study of the knowledge and skills in the assessment and management of patients with traumatic injuries. Students must meet the expected outcomes and terminal objectives of the class. Prerequisite(s): EMSP 1160, EMSP 1501, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404 or departmental approval.
Co-requisite(s): EMSP 1338, EMSP 1355, and EMSP 1260. Reading level 7, Writing level 7, Math level 8.
Course Type: Technical

EMSP 1356 Patient Assessment and Airway Management 3 Credits (2 Lec, 4 Lab)
This course covers knowledge and skills required to perform patient assessment, airway management, and artificial ventilation. Students must meet the expected outcomes and terminal objectives of the class. Prerequisite(s): EMSP 1160, EMSP 1501, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404 or departmental approval.
Co-requisite(s): EMSP 1338, EMSP 1355, and EMSP 1260. Reading level 7, Writing level 7, and Math level 8.
Course Type: Technical

EMSP 1351 Emergency Medical Technician 5 Credits (3 Lec, 8 Lab)
This course provides the preparation for certification as an Emergency Medical Technician (EMT). Students must meet the expected outcomes and terminal objectives of the class.
Course Type: Technical

EMSP 2137 Emergency Procedures 1 Credit (0 Lec, 4 Lab)
This course uses the application of emergency medical procedures. This course was designed to be repeated multiple times to improve student proficiency. Prerequisite(s): EMSP 1338, EMSP 1355, EMSP 1356, EMSP 1260, BIOL 2302, BIOL 2102 and departmental approval.
Course Type: Technical

EMSP 2162 Clinical - EMT Paramedic II 1 Credit (0 Lec, 5 Lab)
This is a health related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Specific detailed learning objectives are developed for the course. Continuous enrollment may be required until these are met. Orientation is required prior to the start of the course. Co-requisite(s): EMSP 2330, 2434 and departmental approval.
Course Type: Technical

EMSP 2168 Practicum/Field Experience - Paramedic 1 Credit (0 Lec, 10 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Practical/field experiences are unpaid external learning experiences. Specific detailed learning objectives are developed for the course and continuous enrollment may be required until these are met. Orientation is required prior to the start of the course. Co-requisite(s): EMSP 2243 or departmental approval.
Course Type: Technical

EMSP 2205 EMS Operations 2 Credits (2 Lec, 10 Lab)
This course is a detailed study of the knowledge and skills necessary to reach competence to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Curriculum is based on the National Emergency Medical Services Educational Standards. Practical/field exercises will be performed, and some may require weekend participation. The student must meet the expected outcomes and terminal objectives of the class. Continuous enrollment may be required until these are met. Prerequisite(s): Program Director/Departmental approval. Reading level 7, Writing level 7, and Math level 8.
Course Type: Technical

EMSP 2206 Emergency Pharmacology 2 Credits (1 Lec, 2 Lab)
This is a study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration and calculation of dosages. Students must meet the expected outcomes and terminal objectives of the class. Prerequisite(s): EMSP 1338, EMSP 1355, EMSP 1356, EMSP 1260, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404 or departmental approval. Reading level 7, Writing level 7, and Math level 8.
Course Type: Technical
EMSP 2237 Emergency Procedures 2 Credits (0 Lec, 4 Lab)
This course uses the application of emergency medical procedures. This course was designed to be taken once and repeated if necessary to improve student proficiency.
Prerequisite(s): EMSP 1338, EMSP 1355, EMSP 1356, EMSP 1260, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404, or departmental approval.

Course Type: Technical

EMSP 2243 Assessment Based Management 2 Credits (0 Lec, 5 Lab)
This course is a summative experience covering comprehensive, assessment-based patient care management for the paramedic level. Students must meet the expected outcomes and terminal objectives of the class.
Prerequisite(s): EMSP 2434, EMSP 2330, or departmental approval.
Reading level 7, Writing level 7 and Math level 8.

Course Type: Technical

EMSP 2262 Clinical - EMT Paramedic II 2 Credits (0 Lec, 10 Lab)
This is a health related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Specific detailed learning objectives are developed for the course. Continuous enrollment may be required until these are met. Orientation is required prior to the start of the course.
Co-requisite(s): EMSP 2330, 2434 and departmental approval.

Course Type: Technical

EMSP 2268 Emergency Medical Technician Paramedic Practicum 2 Credits (0 Lec, 14 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Practical/field experiences are unpaid external learning experiences. Specific detailed learning objectives are developed for the course and continuous enrollment may be required until these are met. Orientation is required prior to the start of the course.
Co-requisite(s): EMSP 2243 or departmental approval.

Course Type: Technical

EMSP 2330 Special Populations 3 Credits (2 Lec, 3 Lab)
This course covers knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Students must meet the expected outcomes and terminal objectives of the class.
Prerequisite(s): EMSP 2206, EMSP 2444 or departmental approval.
Reading level 7, Writing level 7, and Math level 8.

Course Type: Technical

EMSP 2352 Emergency Medical Services Research 3 Credits (3 Lec, 1 Lab)
This course covers primary and/or secondary research in current and emerging issues in EMS. Basic research principles, scientific inquiry, and interpretation of professional literature are emphasized.

Course Type: Technical

EMSP 2434 Medical Emergencies 4 Credits (4 Lec, 1 Lab)
This course covers knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Students must meet the expected outcomes and terminal objectives of the class.
Prerequisite(s): EMSP 2206, EMSP 2444 or departmental approval.
Reading level 7, Writing level 7, Math level 8.

Course Type: Technical

EMSP 2444 Cardiology 4 Credits (2 Lec, 6 Lab)
This course covers assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Students must meet the expected outcomes and terminal objectives of the class.
Prerequisite(s): EMSP 1338, EMSP 1355, EMSP 1356, EMSP 1260, BIOL 2301 and BIOL 2101, and BIOL 2302 and BIOL 2102; or BIOL 2404 or departmental approval. Reading level 7, Writing level 7, and Math level 8.

Course Type: Technical
EMSP 41007 Emergency Care Attendant Refresher 1.2-4.8 Credits
EMSP 41008 Emergency Vehicle Operations 1.6-3.2 Credits
EMSP 41009 Emergency Medical Dispatching 3.2-4.8 Credits
EMSP 41010 Pediatric Education for Pre-Ho 0.8-1.6 Credits
EMSP 41011 Public Access Defibrillation 0.7-1.6 Credits
EMSP 41012 Emergency Medical Services Doc 0.8-4.8 Credits
EMSP 41013 Emergency Medical Technician - 6.4-12.8 Credits
EMSP 41014 Non-Emergency Transport 4.8-9.6 Credits
EMSP 41015 Single Lead ECG Interpretation 1.6-4.8 Credits
EMSP 41016 Introduction to 12-Lead ECG In 0.8-2.4 Credits
EMSP 41019 CPR Basic Life Support 0.8-3.2 Credits
EMSP 41020 Basic Life Support - Adult 0.7-1 Credits
EMSP 41021 Basic Life Support - Pediatric 0.7-1 Credits
EMSP 41026 First Aid 0.7-4 Credits
EMSP 41030 EMS Formal Recertification Course 2.4-14.4 Credits
EMSP 41038 Introduction to Advanced Pract 6.4-14.4 Credits
EMSP 41039 Tactical Medic 4.8-12.8 Credits
EMSP 41040 Pediatric Prehospital Care 1.6-2.4 Credits
EMSP 41041 Emergency Medical Technician - 6.4-17.6 Credits
EMSP 41042 Basic Life Support Instructor 0.7-3.2 Credits
EMSP 41043 Emergency Medical Technician - 3.6-11.2 Credits
EMSP 41045 Basic Trauma Life Support 1.6-4.8 Credits
EMSP 41046 Basic Trauma Life Support - Re 0.8-2.4 Credits
EMSP 41047 Pediatric Advanced Life Support 1.6-4.8 Credits
EMSP 41048 Pre-Hospital Trauma Life Support 0.8-2.4 Credits
EMSP 41049 Pre-Hospital Trauma Life Support 1.6-4.8 Credits
EMSP 41055 Trauma Management 6.4-16 Credits
EMSP 41056 Patient Assessment and Airway 6.4-14.4 Credits
EMSP 41058 Street Sense 4.8-6.4 Credits
EMSP 41060 Clinical - Emergency Medical S 4.8-57.6 Credits
EMSP 41061 Clinical - Emergency Medical S 4.8-57.6 Credits
EMSP 41062 Clinical - Emergency Medical S 4.8-57.6 Credits
EMSP 41063 Clinical - Emergency Medical S 4.8-57.6 Credits
EMSP 41064 Practicum (or Field Experience 11.2-64 Credits
EMSP 41065 Practicum (or Field Experience 11.2-64 Credits
EMSP 41066 Practicum (or Field Experience 11.2-64 Credits
EMSP 41067 Practicum (or Field Experience 11.2-64 Credits
EMSP 41068 Practicum (or Field Experience 11.2-64 Credits
EMSP 41069 Practicum (or Field Experience 11.2-64 Credits
EMSP 41091 Special Topics in Emergency Medicine 0.7-11.2 Credits

EMSP 55003 EMS Operations 4.8 Credits
Prerequisite(s): Department Chair approval and additional information, Central Campus: call 281.476.1862; North Campus: call 281.459.7155
Note: One of 3 courses required for EMT-Basic certification. The textbook from the EMT Basic class will be used. This is a detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. Curriculum based on the National Emergency Medical Services Educational Standards. Practical field exercises are performed, some will require weekend participation. The students must meet the expected outcomes and terminal objectives of the class for completion. (EMSP 2238) Hybrid

EMSP 55004 Emergency Medical Technician 16 Credits
Prerequisite(s): Must be 18 by the class end date and have a high school diploma/GED to be eligible for certification. For approval and additional information, Central Campus: call 281.476.1862; North Campus: call 281.459.7155. Note: Textbook is required. Attendance at the Saturday Skill Day and the Saturday Field Day is mandatory. Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This course provides the introduction to the level of Emergency Medical Technician (EMT) - Basic level of emergency care. All the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services are taught. The course includes American Heart Association Healthcare Provider CPR. Enrollment and successful completion of the EMT Basic Clinical is required for certification. (EMSP 1501)

EMSP 55005 Clinical - EMT 8 Credits
Prerequisite(s): Course approval is required, Central Campus: call 281-476-1862; North Campus: call 281-459-7155. Note: Attendance at the Saturday Clinical Orientation is mandatory. As an additional expense, a background check through the EMT Department, drug screen, physical, immunizations are required. This course is required for EMT-Basic Certification; dates, times and location are determined by instructor. This is a work-based experience with direct client care. This course enables a student to apply theory, skills and concepts learned in the Emergency Medical Technology Basic course. Specific learning objectives are developed by faculty. (EMSP 1160)

EMSP 55007 Clinical - Advanced Emergency Medical Technician 19.6 Credits
Prerequisite(s): Department chair approval is required for registration. This is a work-based experience with direct client care. This course enables the student to apply the theory, skills and concepts learned in the EMT Intermediate course. Specific learning objectives are developed by faculty. You will apply theory and skills learned in EMT Intermediate. (EMSP 1260). Note: Attendance at the Saturday Clinical Orientation is mandatory. As an additional expense, a background check through the EMT Department, drug screen, physical, immunizations are required. Dates, times and location determined by instructor.
EMSP 55008 CPR for Healthcare Providers 0.8 Credits
Prerequisite(s): Student must arrive at class on time with current textbook. The San Jacinto College bookstore is not open on weekends and closes at 4:30 p.m. on Friday. See Note. Note: The current textbook is required to attend class. Students MUST arrive at class on time. Late students or students without books will be sent home. Students sent home for these reasons will NOT be transferred to another class or receive a refund. The cost of the textbook is NOT included in the course cost. This CPR course is for health care providers and professional rescuers. It will meet the requirements for initial certification and recertification for industrial rescue workers, nurses, nursing students, EMTs and other allied health professionals involved in patient care. The class will include the use of Automated External Defibrillators (AEDs), and provide the lifesaving skills for respiratory and cardiac emergencies involving adults, children, and infants. Successful completers will receive an American Heart Association (AHA) certification. The certification card for this course is titled Basic Life Support (AHA). The card is electronic and will be provided within 72 work week hours.

EMSP 55011 Paramedic Refresher 9.6 Credits
Prerequisite(s): EMT Department Approval Note: For information or counseling on recertification requirements, call the Central EMT Department at 281-476-1862 or the North EMT Department at 281-459-7155. This course provides the theory and skills necessary to update and review the theory and skills necessary to meet national and state requirements for remediation or recertification as a paramedic.

EMSP 55013 First Responder Training (ECA) 5.6 Credits
Prerequisite(s): 18 years old, high school or GED. Note: Textbook required. This is an entry level course into emergency medical care. It will prepare students for the National Registry and Texas state certification as an Emergency Medical Responder. This course is also referred to as Emergency Care Attendant, First Responder, or ECA. A CPR card for the Healthcare Provider is required and this training is included in the course. The course also provides the skills training necessary to maintain basic life support for sick or injured patients. Individuals who deal with groups of people on a daily basis, such as day care employees, teachers, lifeguards, firefighters, police, etc. would also find this course useful. Upon successful completion of the course, students are eligible to test for this course is titled Basic Life Support (AHA). The card is electronic and will be provided within 72 work week hours.

EMSP 55014 ACLS Provider 1.6 Credits
Prerequisite(s): For approval and additional information, Central Campus: call 281.476.1862; North Campus: call 281.459.7155 Note: Textbook required Learn the theory skills needed for the management of a cardiovascular emergency as specified by the American Heart Association (AHA) guidelines. Training is for individuals in areas like critical care units, emergency departments, and paramedic ambulance personnel. Establishes a system of protocols for management of the patient experiencing cardiac difficulties. An ACLS card is issued upon successful completion.

EMSP 55015 Fire Rescue/Drill 2009 0.8 Credits
Pre-Requisite: ECA or EMT certification required. Intensive training in fire/rescue drill scenarios to meet continuing education and update requirements associated with professional licensure. Note: No Materials Required.

EMSP 55016 Emergency Procedures 3.7-4.4 Credits
Prerequisite(s): Prior approval required. Instruction in a laboratory environment concentrating on development of practical skills and critical thinking abilities. Students will master a variety of skills appropriate to their training level by a combination of practice; use of mannequins, actors, or other students, and stage scenarios.

EMSP 55017 Emergency Care Attendant Refresher 2.4 Credits
Prerequisite(s): Emergency Care Attendant certification Note: Bring textbook from prior ECA Certification Update and review theory and skills necessary to meet national and/or state requirements for remediation or recertification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR). Note: Bring textbook from prior ECA Certification.

EMSP 55018 EMT Professional Development: Burns and Wound Care 0.7 Credits

EMSP 55019 Medical Care Provider 2.4 Credits
Prerequisite(s): None Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. San Jacinto College Maritime Medical Care Provider (SANJCC 310) course is intended to provide the necessary training for mariners seeking to complete the requirements to provide medical first aid on board ships. Any student who successfully completes the training and presenting a certificate of training within 5 years to a US Coast Guard will satisfy the Medical First Aid training requirements of Section A-VI/4 and Table A-VI/4-1 of the STCW Code, As Amended; and the Medical First-Aid Provider training requirements of 46 CFR 11.309, 11.319, 11.329, 11.335 and 46 CFR 12.619(a)(1). A mariner who successfully completes our Medical Care Provider (SANJCC 310) course will satisfy the following STCW Code Table A-VI/4-1; and, the competency requirements of 46 CFR 12.619(a) (2); and, the Medical First-Aid Provider training requirements of 46 CFR 11.309(a)(4)(i); 46 CFR 11.317(a)(3)(i); 46 CFR 11.319(a)(4)(i); 46 CFR 11.329(a)(4)(i); 46 CFR 11.335(a)(3)(i); and 46 CFR 12.619(a)(1). Pursuant to National Maritime Center Policy Letter 11-02, appropriate photo identification is required for enrollment into a USCG-approved course.

EMSP 55020 Basic EKG Interpretation 0.8 Credits
Interpretation of 12-lead electrocardiograms to identify dysrhythmias; axis deviation; and myocardial ischemia, injury, and infarction. Content includes: overview of the electrophysiology of the heart; lead placement; EKG waveform components; rhythms; ectopy, heart blocks; dysrhythmias.

EMSP 55021 12-Lead EKG 0.8 Credits
Interpretation of 12-lead electrocardiograms to identify dysrhythmias; axis deviation; and myocardial ischemia, injury, and infarction. Content includes: placement technique of 12-lead EKG leads; layout of the 12-lead EKG paper; systematic method of interpreting 12-lead EKG; using a 12-lead EKG to determine location of ischemia, injury or infarction; using a 12-lead EKG to determine the axis deviation and the bundle branch block; using the 12-lead EKG to determine the presence of chamber enlargement.

EMSP 55022 Emergency Medical Services 2: Medical/Trauma Focus 2019 0.8 Credits
Prerequisite(s): None. This 8 hour course focuses on medical and trauma issues encountered by EMS professionals. Note: No materials needed.

EMSP 55023 Emergency Medical Services 3: Medical Focus 2019 0.8 Credits
This 8 hour course focuses on medical issues encountered by EMS professionals. Prerequisite(s): None No materials needed.
EMSP 55024 Emergency Medical Services 4: Pediatric/Current Topics 2019 0.8 Credits
Prerequisite(s): None. This 8 hour course focuses on pediatric and trauma issues encountered by EMS professionals. Note: No materials needed.

EMSP 55025 Emergency Medical Services 5: CPR Refresher/Scenarios 2019 0.8 Credits
Prerequisite(s): None. This 8 hour course focuses on airway scenarios, trauma scenarios, and medical scenarios encountered by EMS professionals. Note: No materials needed.

EMSP 55027 EMT Basic Bridge 8 Credits
Bridges the Emergency Care Attendant to the level of Emergency Medical Technician (EMT) Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance. Technicians (EMT) Basic. Includes all the skills necessary to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. Must be taken in conjunction with EMT Basic Bridge Clinical.

EMSP 55028 EMT Basic Bridge Clinical 8 Credits
EMT work based learning experience that enables the student to apply EMT Basic theory, skills, and concepts. Must be taken in conjunction with EMT Basic Bridge.

EMSP 55029 ACLS Team Training 2009 0.8 Credits
Theory and skills necessary for the management of cardiac emergencies as specified by the American Heart Association. Includes clinical information and related topics relevant to the practice of pre-hospital and hospital personnel in cardiac management.

EMSP 55030 Trauma Management 6.4 Credits
Prerequisite(s): Department Chair approval, Call Central 281-476-1862; North - 281-459-7155 Note: ITLS meets on one weekend, Sat Sun 8A-5P. Call 281-476-1862 or 281-459-7155 for dates, one of 3 courses required for EMT-Intermediate training. EMT-Intermediate Clinical mastery is required for eligibility to test for certification; textbook required. Acquire the detailed knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. The curriculum is based on Department of Transportation National Standard Curriculum. Students must meet the expected outcomes and terminal objectives of the class. International Trauma Life Support-Advanced (ITLS) is included. *Must also enroll in Introduction to Advanced Practice Patient Assessment and Airway Management. (EMSP 1355)

EMSP 55031 First Aid 0.8 Credits
Instruction in first aid for injured and ill persons.

EMSP 55033 First Aid with CPR & AED 1.6 Credits
This course teaches the basics in first aid, adult choking management, adult CPR and the skills required to competently use an AED on an adult patient. This training results in a certification by the American Heart Association in CPR for the Healthcare Provider and First Aid also. Prerequisite(s): None Note: The current textbook is required to attend class. Students MUST arrive at class on time. ***Students must acknowledge the need to arrive at class on time and with the current book for the class. Late students or students without books will be sent home. Students sent home for these reasons will NOT be transferred to another class or receive a refund.

EMSP 55034 Paramedic Clinical - Hospital/Ambulance 6.4 Credits
Work-based experience and direct client care. Specific learning objectives are developed by faculty. You will apply theory and skills learned in EMT Paramedic. Prerequisite(s): Contact the EMT Department @ 281-476-1862 for orientation and scheduling information. Note: Dates, times and location to be determined by the instructor.

EMSP 55035 First Aid CPR and AED 0.8 Credits
Prerequisite(s): None San Jacinto College Maritime First Aid CPR SANJCC – 197 course places an emphasis on the trainee gaining the knowledge, understanding and proficiency in Elementary First Aid as set out in Table A-VI/1-3 of the STCW Code, As Amended; and Enclosure (2) to NVIC 08-14. Take immediate action upon encountering an accident or other medical emergency. Any applicant who has successfully completed our First Aid CPR SANJCC – 197 course will satisfy, the Elementary First Aid training requirements of Section AVI/1 and Table AVI/1-3 of the STCW Code, As Amended, and 46 CFR 15.1105; AND, the Elementary First Aid training requirements of 46 CFR 11.302(a)(3) for an STCW officer endorsement and 46 CFR 12.602(a)(3) for an STCW Rating endorsement; elementary First Aid per 46 CFR 11.302(a)(3) and 46 CFR 12.602(a)(3); and, the first aid and CPR training requirements of 46 CFR 11.201(i)(1), the specific tasks for Elementary First Aid from the National Assessment Guidelines found in NVIC 08-14 for Tasks 4.1.A, 4.1.B, 4.1.C, 4.1.D, 4.1.E, 4.2.A, 4.3.A, 4.3.B, 4.4.A, 4.4.B, 4.4.C, 4.4.D, 4.4.E, 4.4.F, 4.4.G, 4.4.H, 4.4.I, 4.5.A, 4.6.A, 4.6.B, 4.7.A, 4.7.B, 4.7.C, 4.8.A, 4.8.B, 4.8.C, 4.8.D and 4.9.A; AND, if the certificate of training if presented within one year of the date of training, the First Aid CPR training requirements of 46 CFR 11.201(i) for original issuance of a national officer endorsement. This course of instruction is designed to provide to the student a training experience in formal classroom instruction combined with hands-on practical application and demonstration. This training course places a heavy emphasis on practical knowledge of topics including but not limited to: Types of emergency situations; take immediate action upon encountering an accident or other medical emergency; make assessment of casualties and threats to own safety; appreciation of the human body structure and functions; understanding of immediate measures to be taken in cases of emergency. The course is open primarily to entry-level mariners and other mariners needing to satisfy the emergency medical training requirements and preferably should be given before they take up employment in sea-going vessels. There are no educational requirements. Pursuant to National Maritime Center Policy Letter 11-02, appropriate photo identification is required for enrollment into a U.S.C.G. approved course. It shall be the policy of this school that all students provide appropriate photo identification upon enrollment
EMSP 55039  First Responder to EMT-Basic Bridge  16.8 Credits  
Prerequisite(s): First Responder (ECA) course completion certificate or Certification. This class will provide Texas certified First Responders, also known as Emergency Care Attendants or ECAs, with a mechanism to become EMTs without taking the entire EMT class. This bridge program will provide students with an academic and working knowledge and review of First Responder care and add content from the EMT-Basic course. The basic concepts needed to function as an EMT-Basic will be provided. EMTs learn to manage an airway using artificial devices, assess the severity of an illness or injury, manage wounds and bleeding, immobilize fractures, perform CPR, utilize an automated defibrillator and many other procedures. Recent curriculum changes at the national and state level allow EMTs to assist with the administration of some medications. All the skills needed to provide emergency medical care at a basic life support level with an ambulance service or other specialized services is included. This course provides 80 hours of work based learning experiences that enable the student to apply EMT Basic theory, skills, and concepts. Note: Textbook required.

EMSP 55040  Introduction to Advanced Practice  6.4 Credits  
Prerequisite(s): Department Chair approval, Central - Call 281-476-1862; North - 281-459-7155 Note: One of 3 courses required for EMT-Intermediate training. EMT-Intermediate Clinical mastery is required for eligibility to test for certification; textbook required. Explore the fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. The curriculum is based on Department of Transportation National Standards Curriculum. Students will learn the roles and responsibilities of advanced EMS personnel within the EMS system, basic pathophysiology, basic assessment and management of emergency patients, effective communication, interpretation of medical/legal issues, ethical behavior and well-being of the EMS professional. *Must also enroll in Trauma Management Patient Assessment and Airway Management. (EMSP 1338)

EMSP 55041  Patient Assessment and Airway Management  6.4 Credits  
Prerequisite(s): Department Chair approval; call Central 281-476-1862; North 281-459-7155 Note: One of 3 courses required for EMT-Intermediate training. EMT-Intermediate Clinical mastery is required for eligibility to test for certification; textbook required. Students will participate in a detailed study of the knowledge and skills required to perform patient assessment, airway management and artificial ventilation. The curriculum is based on Department of Transportation National Standards Curriculum. Students will learn to perform a history and comprehensive physical exam on all patient populations. Skills will learn to establish and maintain patent airways, provide adequate oxygenation, and establish patient ventilation and effective communication. *Must also enroll in Trauma Management Introduction to Advanced Practice. (EMSP 1356).

EMSP 55044  Advanced Cardiovascular Life Support Certification (ACLS)  0.8 Credits  
Prerequisite(s): For approval and additional information, call 281-476-1862. Note: Current textbook is required to attend class. Students without a book, or with an old edition will not be able to participate. No transfers or refunds are issued in these situations. SJC Bookstore is not open on weekends. This ACLS course provides a review of the updates in theory skills needed for the management of cardiac care, Cardiopulmonary Resuscitation (CPR), rhythm interpretation and treatment medications for patients in cardiopulmonary arrest. At the conclusion of the training, trainees will be able to: manage ventricular fibrillation/pulseless ventricular tachycardia according to the ACLS; perform defibrillation with minimal interruption in chest compressions; identify likely causes of Asystole and pulseless electrical activity; identify patients with symptoms of acute coronary syndrome and stroke; and identify and manage patients with unstable bradycardia and tachycardia and safely and effectively treat both patient types.

EMSP 55045  Medical Care Person in Charge  4 Credits  
Prerequisite(s): Medical Care Provider within 12 months Those entering the course should have successfully completed training in medical first aid on board ship, such as specified in the IMO Model Course 1.14 Medical First Aid (aka Medical Care Provider) course within 6 months of starting the PIC course. Mariners seeking a certification at the Operational Level as Officer In Charge of a Navigational Watch on vessels of 500 or more gross tonnage (ITC); AND Officer In Charge of a Navigational Watch of vessels less than 500 or more gross tonnage (ITC); AND Officer In Charge of an Engineering Watch, Designated Duty Engineer or Assistant Engineer on vessels of 750kW/1,000 HP or more; AND Electro-Technical Officer of vessels powered by main propulsion machinery of 750kW/1,000 HP or more. The course is open to seafarers to be designated to be in charge of medical care on board ships. The course is also open to seafarers who have previously completed this Medical Care training and wish to comply with the recommendation in the IMO/ILO Document for Guidance, 1985 that a refresher course should be undertaken at intervals of approximately five years. It shall be the policy of this school that all students provide appropriate photo identification upon enrollment.

EMSP 55046  EMS Supervision/Management  4.8 Credits  
Prerequisite(s): EMT Dept approval required. Call 281-476-1862. On-Line courses require basic computer skills. Must be a currently certified Paramedic. Must enroll concurrently with EMSP 2060. This course covers instruction, literary review, group discussion, and case study on topics pertinent to the emergency medical service (EMS) field supervisor or manager. Identification and interpretation of laws and regulations affecting EMS operations; demonstration of principles of leadership and supervision; discussion and application of strategies used in financial management; explanation and exhibition of principles of personnel management; and development of strategies for evaluating and improving EMS operations. (EMSP 2359)

EMSP 55047  Clinical - EMS Supervision  6.4 Credits  
Prerequisite(s): EMT Dept approval required. Call 281-476-1862. Clinical orientation - Saturday 8am - 12pm prior to class start is required. Must be a currently certified Paramedic. Must enroll concurrently with EMSP 2059. This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Specific detailed learning objectives are developed for the course. (EMSP 2160)
EMSP 55048  EMT Topics - 2014 9.6 Credits
Prerequisite(s): EMT Dept approval required. Call 281.476.1862.
EMSP 2243, 2168 and departmental approval are required. Reading level 7, Writing level 7, and Math level 7 are required. The course consists of 48 lecture hours and 48 lab hours. This course includes topics that address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. The curriculum is based on the National Emergency Medical Services Educational Standards. This course was designed to be repeated multiple times to improve student proficiency.

EMSP 55050  Emergency Care Attendant Refresher - 28 hr 2.8 Credits
Prerequisite(s): Emergency Care Attendant certification. Note: Bring textbook from prior ECA Certification. Update and review theory and skills necessary to meet national and/or state requirements for remediation or recertification as an Emergency Care Attendant (ECA)/Emergency Medical Responder (EMR). Includes 4 hour CPR Healthcare Professional recertification.

EMSP 55051  EKG 12-Lead Introduction 0.7 Credits
Prerequisite(s): Knowledge of basic EKG interpretation is required.
Note: Materials provided. Training will include basic introductory skills such as power-up; equipment assembly; demonstrations of electrode placement; identification of basic components of the ECG and distinguish abnormal from normal; trouble shooting of poor or unreadable displays; recognition the significance of EKG rhythms; identification of rhythms that are immediate life threats; printing 12-lead ECG paper tracings; and disassembly, resupply storage 12 lead EKG equipment. Some courses will also include a review of 12 lead EKG interpretation. Knowledge of basic EKG interpretation is required prior to training students in the interpretation of 12 lead EKGs.

EMSP 55052  First Aid & CPR (BST Part 2) 0.8 Credits
Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. The course is open primarily to entry-level mariners and other mariners needing to satisfy the emergency medical training requirements and preferably should be given before they take up employment in sea-going vessels. There are no educational requirements. Pursuant to National Maritime Center Policy Letter 11-02.

EMSP 55053  Emergency Medical Update 0.8 Credits
Prerequisite(s): None Note: No textbook Required. This 8 hour update is designed to satisfy the Texas Department of State Health Services Option 2 requirement for emergency services professionals. Content areas include preparatory, airway management/ventilation, patient assessment, trauma, medical, and special considerations.

EMSP 55054  First Aid CPR, AED with Bloodborne Pathogen Training 0.8 Credits
Prerequisite(s): None Note: The current textbook is provided. This course teaches the basics in first aid, adult choking management, adult CPR and the skills required to competently use an AED on an adult patient. This training results in a certification by the American Heart Association in Adult CPR and First Aid. Training that meets the OSHA requirements for Bloodborne Pathogens training are included in this course.
### Engineer Design Graph (DFTG)

**DFTG 1305 Technical Drafting  3 Credits  (2 Lec, 4 Lab)**
This course is an introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, and auxiliary views.
Course Type: Technical

**DFTG 1409 Basic Computer-Aided Drafting  4 Credits  (3 Lec, 3 Lab)**
This course in an introduction to computer-aided drafting with an emphasis on setup, creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.
Course Type: Technical

**DFTG 1417 Architectural Drafting-Residential  4 Credits  (3 Lec, 3 Lab)**
This course focuses on architectural drafting procedures, practices, terms, and symbols, including preparation of detailed working drawings for residential structures with emphasis on light frame construction methods.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

**DFTG 1433 Mechanical Drafting  4 Credits  (3 Lec, 3 Lab)**
This course is a study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

**DFTG 1445 Parametric Modeling and Design  4 Credits  (3 Lec, 3 Lab)**
This course offers training with a parametric-based design software for 3D design and drafting.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

**DFTG 2317 Descriptive Geometry  3 Credits  (2 Lec, 4 Lab)**
This course focuses on developing graphical solutions to problems involving points, lines, and planes in space.
Prerequisite(s): DFTG 1305
Course Type: Technical

**DFTG 2338 Final Project - Advanced Drafting  3 Credits  (2 Lec, 4 Lab)**
This is a drafting course in which students participate in a comprehensive project from conception to conclusion. Department chair approval required.
Prerequisite(s): 16 credit hours of Engineering Design Graphics courses from the following group: ARCE 1415, ARCE 1421, ARCE 1452, DFTG 1417, DFTG 1433, DFTG 2402, DFTG 2406, DFTG 2407, DFTG 2408, DFTG 2421, DFTG 2423, DFTG 2428, DFTG 2430, DFTG 2431, DFTG 2435, DFTG 2445, DFTG 2450, DFTG 2457, DFTG 2458, or department chair approval. Eight of these credits must be earned at San Jacinto College.
Course Type: Technical

**DFTG 2386 Internship-Drafting and Design Technology/Technician  3 Credits  (0 Lec, 18 Lab)**
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. An Internship may be either paid or unpaid. The college does not contract with companies to provide employment. Finding a suitable drafting position is the responsibility of the student. The student must acquire a minimum of 288 hours of supervised, work-based drafting or engineering-related experience during the semester to successfully complete the course. The job description for the work site must relate to the general curriculum of the Engineering Design Graphics department. Department chair approval required.
Prerequisite(s): 16 hours of Engineering Design Graphics courses from the following group: ARCE 1415, ARCE 1421, ARCE 1452, DFTG 1417, DFTG 1433, DFTG 2402, DFTG 2406, DFTG 2407, DFTG 2408, DFTG 2421, DFTG 2423, DFTG 2428, DFTG 2430, DFTG 2431, DFTG 2435, DFTG 2445, DFTG 2450, DFTG 2457, DFTG 2458, or department chair approval. Eight of these credits must be earned at San Jacinto College
Course Type: Technical

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San Jacinto College 2018-2019
DFTG 2423 Pipe Drafting 4 Credits (3 Lec, 3 Lab)
This course is a study of pipe, fittings, symbols, specifications and their applications to a piping process system, including the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

DFTG 2424 Architectural Drafting-Commercial 4 Credits (3 Lec, 3 Lab)
This course focuses on architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

DFTG 2430 Civil Drafting 4 Credits (3 Lec, 3 Lab)
This course is an in-depth study of drafting methods and principles used in civil engineering.
Prerequisite(s): DFTG 2421 or department chair approval
Course Type: Technical

DFTG 2431 Advanced Technologies in Architectural Design and Drafting 4 Credits (3 Lec, 3 Lab)
This course focuses on the use of architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential/commercial and industrial architecture.
Prerequisite(s): DFTG 1417 or DFTG 2428 or department chair approval
Course Type: Technical

DFTG 2432 Advanced Computer-Aided Drafting 4 Credits (3 Lec, 3 Lab)
This course covers application of advanced CAD techniques.
Prerequisite(s): DFTG 1409 or department chair approval
Course Type: Technical

DFTG 2435 Advanced Technologies in Mechanical Design and Drafting 4 Credits (3 Lec, 3 Lab)
This course will focus on the use of parametric-based software for mechanical design for advanced modeling and analysis.
Prerequisite(s): DFTG 2406 or department chair approval
Course Type: Technical

DFTG 2440 Solid Modeling/Design 4 Credits (3 Lec, 3 Lab)
This is a computer-aided modeling course that includes development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.
Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval
Course Type: Technical

DFTG 2445 Advanced Pipe Drafting 4 Credits (3 Lec, 3 Lab)
This course is a continuation of pipe drafting concepts building on basic principles acquired in pipe drafting.
Prerequisite(s): DFTG 2423 or department chair approval
Course Type: Technical

DFTG 2450 Geometric Dimensioning and Tolerancing 4 Credits (3 Lec, 3 Lab)
This course is a study of Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings.
Prerequisite(s): DFTG 1433 or department chair approval
Course Type: Technical

DFTG 2457 Advanced Technologies in Pipe Design and Drafting 4 Credits (3 Lec, 3 Lab)
This course focuses on advanced design and production techniques using specialized process plant based design software.
Prerequisite(s): DFTG 2423 or department chair approval
Course Type: Technical

DFTG 2458 Advanced Machine Design 4 Credits (3 Lec, 3 Lab)
This course covers design process skills for the production of a complete design package, which includes jig and fixture design, extrusion dies, and injection mold design.
Prerequisite(s): DFTG 2406 or department chair approval
Course Type: Technical
Note: Textbook required This course is a study of pipe fittings, symbols, and isometrics. (DFTG 2423)

Prerequisite(s): DFTG 1405 and DFTG 1409 or department chair approval.

Note: Textbook required. Additional fees may apply for online and hybrid classes. This course is an introduction to computer-aided drafting with an emphasis on setup, creating and modifying geometry, storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers coordinate systems, and plot/print to scale. (DFTG 1409)

Prerequisite(s): DFTG 1409 or department chair approval. Note: Textbook required This course covers advanced techniques, including the use of a customized system, and presentation of advanced drawing applications, such as three dimensional solids modeling and linking graphic entities to external non-graphic data. (DFTG 2432)

Prerequisite(s): DFTG 1405 or DFTG 1409 or department chair approval. Note: Textbook required The course focuses on plotting of surveyors' field notes including drawing elevations, contour lines, plan and profiles, and laying out traverses. (DFTG 2421)

Prerequisite(s): DFTG 1405 or DFTG 1409 or department chair approval. Note: Textbook required This course focuses on architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structures with emphasis on light frame construction methods. (DFTG 1417)

Prerequisite(s): DFTG 1405 and DFTG 1409. Textbook Required. This is a supplemental course to Basic Computer-Aided Drafting using an alternative computer-aided drafting (CAD) software to create detail and working drawings. (DFTG 1410)

Electrical and electronic drawings stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams.

Note: Textbook required Students will learn the theory and practice of design, as well as problem-solving. (DFTG 2406)

This course emphasizes advanced dimensioning techniques, development/use of prototype drawings, drawing construction, 2D and 3D environments. (DFTG 2419)
DFTG 55012 Electrical Drafting for Industrial Applications  9.6 Credits
A study of electrical drawing preparation as applied to commercial and industrial standards. (DFTG 2476)

DFTG 55013 Blueprint Reading for Welders  2.4 Credits
Provides students with information required to interpret blueprint drawings used in the welding trades. Topics include welding symbols, isometric views, multi-views, sections, dimensions, line types and welding abbreviations.

DFTG 55014 Blueprint Reading for Machinists  2.4 Credits
Provides students with information required to interpret blueprint drawings used in the machinist trades. Topics include symbols, pictorial drawings, isometric views, multi-views, sections, dimensions, line types and abbreviations.

DFTG 55015 Pro - Basic Skills  3.2 Credits
Learn Pro Engineer (ProE) software for architectural, electrical, mechanical engineering or for interior design.

DFTG 55016 AutoCAD - Basic Skills  1.6 Credits
Learn to create, edit, and plot line drawings; create, store, retrieve predefined components; equipment and software selection.

DFTG 55017 Blueprint Reading for Metal Trade Workers  2.4 Credits
Provides students with the symbols and interpretation of working drawings used in the metal trades.

DFTG 55018 Blueprint Reading for Metal Trades Workers & Inspectors  2.4 Credits

DFTG 55019 Geometric Dimensioning & Tolerance Fundamentals  2.4 Credits

DFTG 55020 Geometric Dimensioning & Tolerance Applications  1.6 Credits

DFTG 55021 Tolerance Stack-Ups  1.6 Credits
Advanced training teaches how to study the cumulative effect of part tolerances in order to reduce product costs. Numerous assemblies will be studied. A workshop to apply tolerance stack-up analysis techniques to participant supplied problems to be included.

DFTG 55022 Blueprint Reading for Industry  1.6 Credits
This basic blueprint reading training program explains the importance of engineering drawings in manufacturing and thoroughly describes the generation and duplication of such drawings.

DFTG 55023 Parametric Modeling and Design  9.6 Credits
Prerequisite(s): DFTG 1409 or DFTG 1413 or department chair approval. Note: Textbook required This course offers training with a parametric-basic software for 3D design and drafting. (DFTG 1445)

DFTG 55024 Architectural Drafting - Commercial  9.6 Credits
Prerequisite(s): DFTG 1405 or DFTG 1413, and DFTG 1409 or department chair approval. Note: Textbook required This course focuses on architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. (DFTG 2428)

DFTG 55025 Electrical Drafting  9.6 Credits
Prerequisite(s): DFTG 1405 and DFTG 1409 or department chair approval. Note: Textbook required This course is a study of area lighting, control systems and power layouts, electrical and safety codes, local factors and distribution requirements. (DFTG 2407)

DFTG 55026 Instrumentation Drafting  9.6 Credits
Prerequisite(s): DFTG 1405 and DFTG 1409 or department chair approval. Textbook Required. This course will include a study of principles of instrumentation applicable to industrial applications, fundamentals of measurement and control devices, currently used ISA (Instrumentation Society of America) symbology, and basic flow sheet layout and drafting practices. (DFTG 2408)

DFTG 55027 Advanced Technologies in Pipe Design and Drafting  9.6 Credits
Prerequisite(s): DFTG 2423 Note: Textbook Required. Advanced design and production techniques using specialized process plant based design software. (DFTG 2457)

DFTG 55028 Descriptive Geometry  9.6 Credits
Prerequisite(s): DFTG 1305 or DFTG 1405. Note: Textbook is required. This course covers graphical solutions to problems involving points, lines and planes in space. (DFTG 2317)

DFTG 55029 Advanced Technologies in Mechanical Drafting Creo II  9.6 Credits
Prerequisite(s): DFTG 2402 or department chair approval. Note: Textbook required This course will focus on the use of parametric-based software for mechanical design for advanced modeling and analysis. (DFTG 2435)

DFTG 55030 Machine Drafting  9.6 Credits
Prerequisite(s): DFTG 1305 or DFTG 1405 and DFTG 1409 or department chair approval. Note: Textbook required This course will include a study of production of detail and assembly drawings of machines, threads, gears, utilizing tolerances, limit dimensioning, and surface finishes. (DFTG 2402)

DFTG 55031 Advanced Machine Design SolidWorks  9.6 Credits
Prerequisite(s): DFTG 2402 corequisite or department chair approval. Note: Textbook required This course covers design process skills for the production of a complete design package, which includes jig and fixture design, extrusion dies, and injection mold design. (DFTG 2458)

DFTG 55032 Blueprint Reading for Manufacturing  2.4 Credits
Note: Materials are provided. In this course you will be introduced to engineering drawings and blueprints that are used in the manufacturing environment. You will discover all types of lines and their use, a title block and its contents, datum planes and drawing symbols used. You will discover isometric drawings and view placements.

DFTG 55033 Blueprint Reading for Industry  1.6 Credits
Prerequisite(s): None Note: Materials provided This basic print reading program explains the importance of engineering drawings in manufacturing and thoroughly describes the generation and duplication of such drawings. It discusses the basic elements of a blueprint and introduces the concepts which students must master to successfully interpret engineering drawings. This blueprint reading training covers the principles of shop sketching, basic review of shop mathematics, and use of common measuring tools. This course is based on current ANSI standards. Upon completion of the course, trainees will be able to, define different types of scales used on drawings, identify the height, width, and length dimensions of a drawing, interpret the various symbols and notations used on drawings and draw multiview sketches of simple objects that accurately show all the details of the objects.
DFTG 55034  GD&T Basics  4 Credits
Prerequisite(s): None  Note: Materials provided  This course is an introduction to the Y14.5M-1994 and Y14.5-2009 standards, focusing on the what, when, why, and the how of GDT. The main goal of the GDT materials is to bring all participants to a common, basic and operational level of understanding. Upon completion of the course, trainees will be able to create clear, concise drawings, improve product design, create drawings that reduce controversy, guesswork, and assumptions throughout the manufacturing process and effectively communicate or interpret design requirements for suppliers and manufacturing.

DFTG 55035  Advanced Technologies in Architectural Design & Drafting  9.6 Credits
Prerequisite(s): DFTG 1417 or Department Chair Approval  Note: Textbook is required.  This course focuses on the use of Architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows, and specific design requirements for construction in residential/ commercial and industrial architecture.  (DFTG 2431)
ENGINEERING (ENGR)

ENGR 1201 Introduction to Engineering  2 Credits  (1 Lec, 3 Lab)
This is an introduction to the engineering profession with emphasis on technical communication and team-based engineering design.
Note: Some mechanical engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she wants to transfer for specific applicability of this course to the engineering major.
Prerequisite(s): Reading level 7, MATH 1314 or higher
Course Type: Academic

ENGR 1304 Engineering Graphics I  3 Credits  (2 Lec, 2 Lab)
Engineering Graphics I introduces computer-aided drafting, using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication. Topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.
Prerequisite(s): MATH 1314 or higher.
Course Type: Academic

ENGR 2105 Electrical Circuits I Laboratory  1 Credit  (0 Lec, 3 Lab)
In the laboratory component of Circuits I, students conduct experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Students are introduced to principles and operations of basic laboratory equipment and to writing laboratory reports.
Co-requisite(s): ENGR 2305.
Course Type: Academic

ENGR 2301 Engineering Mechanics - Statics  3 Credits  (3 Lec, 0 Lab)
This course introduces the basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia.
Prerequisite(s): PHYS 2325 and PHYS 2125
Course Type: Academic

ENGR 2302 Engineering Mechanics - Dynamics  3 Credits  (3 Lec, 0 Lab)
This course is a study of basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.
Prerequisite(s): ENGR 2301.
Course Type: Academic

ENGR 2304 Programming for Engineers  3 Credits  (3 Lec, 0 Lab)
This course introduces programming principles and techniques for matrix and array operations, equation solving, and numeric simulations applied to engineering problems and visualization of engineering information; platforms include spreadsheets, symbolic algebra packages, engineering analysis software, and laboratory control software.
Prerequisite(s): MATH 2413.
Course Type: Academic

ENGR 2305 Electrical Circuits I  3 Credits  (3 Lec, 0 Lab)
Circuits I introduces the principles of electrical circuits and systems, including basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources); the topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first- and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems.
Prerequisite(s): PHYS 2326 and PHYS 2126;
Co-requisite(s): MATH 2320 and ENGR 2105.
Course Type: Academic

ENGR 2308 Engineering Economics  3 Credits  (3 Lec, 0 Lab)
The student will utilize methods for determining the comparative financial desirability of engineering alternatives; will be provided the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam.
Prerequisite(s): MATH 2413
Course Type: Academic
### ENGINEERING DRAFTING (ARCE)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCE 1415</td>
<td>Structural Steel Detailing</td>
<td>4</td>
<td>(3 Lec, 3 Lab)</td>
</tr>
<tr>
<td></td>
<td>This course covers the preparation of structural steel drawings and bill of materials for the purpose of fabrication and erection. Emphasis will be placed upon using structural design framing plans to develop detailed steel members, connections, and assemblies. Prerequisite(s): ARCE 1452 or department chair approval</td>
<td></td>
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<tr>
<td></td>
<td>Course Type: Technical</td>
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<tr>
<td>ARCE 1421</td>
<td>Architectural Illustration</td>
<td>4</td>
<td>(3 Lec, 3 Lab)</td>
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<tr>
<td></td>
<td>This course focuses on architectural drawing and sketching. Emphasizes architectural structures in 3-D or pictorially, either by hand or computer software.</td>
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<td></td>
<td>Course Type: Technical</td>
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<tr>
<td>ARCE 1452</td>
<td>Structural Drafting</td>
<td>4</td>
<td>(3 Lec, 3 Lab)</td>
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<tr>
<td></td>
<td>This course is a study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems, including detailing of concrete, wood, and steel to meet industry standards of the American Institute of Steel Construction and The American Concrete Institute. Prerequisite(s): DFTG 1305 and DFTG 1409 or department chair approval</td>
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<td></td>
<td>Course Type: Technical</td>
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<tr>
<td>ARCE 55000</td>
<td>Structural Drafting</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite(s): DFTG 1305 or DFTG 1405 and DFTG 1409 or Department Chair Approval. Note: Textbook required A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute. (ARCE 1452)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCE 55001</td>
<td>Architectural Illustration</td>
<td>9.6</td>
<td></td>
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<tr>
<td></td>
<td>Note: Textbook required This course focuses on architectural illustration and rendering techniques. It emphasizes architectural structures in 3-D or pictorially either by hand or computer software. (ARCE 1421)</td>
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</tbody>
</table>
ENGLISH (ENGL)

ENGL 0107 Developmental Writing (NCBO) 1 Credit (1 Lec, 0 Lab)
This course is a study of the development of fundamental writing skills such as idea generation, organization, style, utilization of standard English, and revision.
Course Type: College Prep

ENGL 0306 Beginning Writing Skills 3 Credits (3 Lec, 1 Lab)
This course is designed for systematic study and review of applicable grammatical forms and proper punctuation in a gradual progression from sentence structure to paragraph writing. The course offers opportunities to develop basic writing skills and to enhance critical thinking. The course includes one hour of lab weekly. This course is not applicable to any degree.
Prerequisite(s): A grade of C or above in ENGL 0306 or writing score

ENGL 0307 Preparation for College English 3 Credits (3 Lec, 0 Lab)
This course is a comprehensive review of the fundamentals of composition and grammar with emphasis on paragraph writing, beginning theme construction, and mechanical and syntactical correctness. It provides students with opportunities to develop critical reading and writing skills through reading and discussing the works of professional writers. This course is not applicable to any degree.
Prerequisite(s): A grade of C or above in ENGL 0306 or writing score within defined range

ENGL 0308 Writing and Grammar: English for Speakers of Other Languages 3 Credits (3 Lec, 1 Lab)
This course reviews the fundamentals of composition and grammar with emphasis on logical paragraph and essay construction, clear and idiomatic English, appropriate syntactical features, and mechanical correctness. In addition, the course provides for the development of critical reading, thinking, writing, and speaking skills through the analysis and discussion of professional essays. Laboratory sessions provide group and individual practice with a variety of second language problem areas. This course is not applicable to any degree.
Prerequisite(s): A grade of C or above in ENGL 0306 or writing score within defined range

ENGL 1301 Composition I 3 Credits (3 Lec, 0 Lab)
This course provides an intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis is on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus is on writing the academic essay as a vehicle for learning, communicating, and critical analysis.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

ENGL 1302 Composition II 3 Credits (3 Lec, 0 Lab)
This course provides an intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis is on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions.
Prerequisite(s): ENGL 1301 or equivalent

ENGL 2301 Technical and Business Writing 3 Credits (3 Lec, 0 Lab)
This course is an intensive study of and practice in professional settings. It focuses on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, email messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creating of ethical and efficient documents.
Prerequisite(s): ENGL 1301
Course Type: Academic

ENGL 2302 British Literature I 3 Credits (3 Lec, 0 Lab)
This is a survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.
Prerequisite(s): ENGL 1301
Course Type: Academic

ENGL 2303 British Literature II 3 Credits (3 Lec, 0 Lab)
This is a survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.
Prerequisite(s): ENGL 1301
Course Type: Academic
**ENGL 2327 American Literature I 3 Credits (3 Lec, 0 Lab)**
This is a survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2328 American Literature II 3 Credits (3 Lec, 0 Lab)**
This is a survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2332 World Literature I 3 Credits (3 Lec, 0 Lab)**
This is a survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2333 World Literature II 3 Credits (3 Lec, 0 Lab)**
This is a survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2341 Literature and Film 3 Credits (3 Lec, 0 Lab)**
This course covers the study of one or more literary genres including, but not limited to, fiction, drama and film are included in this course. The course offers an analytical approach to both literature and film. Through various methods, students will learn conceptual frameworks and vocabulary for understanding and explaining how films and literature enhance our perception of society and inform our awareness and judgment. The course strives to help students critically approach culture by analyzing literary works.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2351 Mexican American Literature 3 Credits (3 Lec, 0 Lab)**
A survey of Mexican American/Chicano/a literature from Mesoamerica to the present. Students will study literary works of fiction, poetry, drama, essays, and memoirs in relation to their historical, linguistic, political, regional, gendered, and cultural contexts. Texts will be selected from a diverse group of authors, literary movements, and media forms. Topics and themes may include the literary performance of identity and culture, aesthetic mediation of racialization, struggle and protest, and artistic activism.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2370 Selected Studies in Literature 3 Credits (3 Lec, 0 Lab)**
This course offers students opportunities for intensive analysis of literary works that may be unified by theme, period, or subject matter. Students will be asked to complete a variety of writing assignments including essay examinations, short compositions, and investigative papers. The course may be repeated a maximum of two times for transfer credit provided the repeated course covers a different topic.
Prerequisite(s): ENGL 1301
Course Type: Academic

**ENGL 2389 Academic Cooperative in Composition 3 Credits (1 Lec, 8 Lab)**
This is an instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of English language and literature. Prerequisite or Co-requisite(s): ENGL 1302, a professor's written recommendation, and a writing sample. Reading level 7, Writing level 7
Course Type: Academic
ENGLISH/SPKRS OTHER LANG (ESOL)

ESOL 0110  English as a Second Language (NCBO)  1 Credit  (1 Lec, 0 Lab)
This course is a computer based, student self-paced practice to develop
reading, grammar, writing, listening and/or speaking skills for non-native
speakers and to prepare students to function in educational, vocational
and/or personal English language contexts. This course may be repeated
to improve proficiency.
Course Type: College Prep

ESOL 0311  Introductory Listening and Speaking  3 Credits  (3 Lec, 1 Lab)
This course focuses on developing basic social and pre-academic
speaking and listening skills which include pronouncing, describing,
giving directions, and comprehending oral directions. This course does
not apply toward any degree.
Prerequisite(s): standardized test of English language proficiency.
Course Type: College Prep

ESOL 0351  Introductory Composition  3 Credits  (3 Lec, 0 Lab)
This course focuses on strategies and techniques of writing and
composition. Open only to non-native speakers.
Course Type: College Prep

ESOL 0362  Intermediate ESOL Oral Communication  3 Credits  (3 Lec, 1 Lab)
This course develops listening and speaking skills in speakers of
languages other than English and prepares them to function in
educational, vocational and/or personal English-speaking contexts.
Prerequisite(s): ESOL 0311 or meet the required score on a standardized
test of English language proficiency. This is an intermediate-level course.
Course Type: College Prep

ESOL 0363  Advanced ESOL Oral Communication  3 Credits  (3 Lec, 1 Lab)
This course develops listening and speaking skills in speakers of
language other than English and prepares them to function in
educational, vocational and/or personal English-speaking contexts.
Prerequisite(s): ESOL 0362 Intermediate Oral Communication for Non-
Native Speakers or meet the required score on a standardized test of
English language proficiency. This is an advanced-level course.
Course Type: College Prep

ESOL 0372  Intermediate Reading and Writing for Non-Native Speakers  3 Credits  (3 Lec, 1 Lab)
This course focuses on strategies and techniques of writing and
composition and develops reading proficiency, vocabulary, and writing
and grammar skills for academic, career, or personal purposes in
speakers of languages other than English in order to prepare them to
function in a multicultural and multilingual society.
Prerequisite(s): ESOL 0372 or meet the required score on a standardized
test of English language proficiency. This is an advanced-level course.
Course Type: College Prep

ESOL 0373  Advanced Reading and Writing for Non-Native Speakers  3 Credits  (3 Lec, 1 Lab)
This course focuses on strategies and techniques of writing and
composition and develops reading proficiency, vocabulary, and writing
and grammar skills for academic, career, or personal purposes in
speakers of languages other than English in order to prepare them to
function in a multicultural and multilingual society.
Prerequisite(s): ESOL 0372 or meet the required score on a standardized
test of English language proficiency. This is an advanced-level course.
Course Type: College Prep

ESOL 0382  Intermediate Grammar for Non-Native Speakers  3 Credits  (3 Lec, 1 Lab)
This course focuses on Standard English grammar usage for academic
purposes. Open only to non-native speakers.
Prerequisite(s): Meet the required score on standard test of English
language proficiency. This is an intermediate-level course.
Course Type: College Prep

ESOL 0383  Advanced Grammar for Non-Native Speakers  3 Credits  (3 Lec, 1 Lab)
This course focuses on Standard English grammar usage for academic
purposes. Open only to non-native speakers.
Prerequisite(s): ESOL 0382 or meet the required score on a standardized
test of English language proficiency. This is an advanced-level course.
Course Type: College Prep
ENGLISH/TECH WRITING (ETWR)

ETWR 1302 Introduction to Technical Writing 3 Credits (3 Lec, 0 Lab)
This course introduces the principles, techniques, and skills needed for scientific, technical, and business writing. This course is designed for technical students.
Prerequisite(s): Reading level 4

Course Type: Technical

ETWR 2305 Intermediate Technical Report Writing 3 Credits (3 Lec, 0 Lab)
This course focuses on essential phases of developing effective technical process documents. Emphasizing the roles of those involved in developing documentation reports, the course also includes practice in developing the reporting deliverables needed for complete and successful description of processes. This course is designed for technical students.
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

ETWR 35001 Technical Writing 101 2.4 Credits
ETWR 41091 ST in Eng. Tech. and Bus. Writ 0.7-11.2 Credits
ETWR 55000 Technical Report Writing 2.4 Credits
This course covers the basics of effective technical writing. Special attention is paid to how to plan, organize, develop, and edit technical documents for the best results.

ETWR 55001 Requirements Definition 1.6 Credits
ETWR 55002 Bioastronautics Technical Report Writing 0.8 Credits
Created for Aerospace Academy class.

ETWR 55003 Write Right: Effective Business Writing for Busy Professionals 0.8 Credits

ETWR 55004 Technical Writing: Improve Your Skills 0.8 Credits
Sharpen your technical writing skills and discover how to recognize, analyze, and accommodate diverse audiences as you write your correspondence. Practice your abilities on how to evaluate, and incorporate pertinent information and produce documents which are appropriate to audience, purpose, and genre. This hands-on practical course will cover various written communication. It allows the participant to practice on how to write for easy reading and subject navigation. Additional topics include: editing for appropriate style, including attention to word choice, sentence structure, punctuation, and spelling.

ETWR 55005 Introduction to Technical Writing 4.8 Credits
Prerequisite(s): Reading Level 4, Computer Literacy in MS Office Note: Textbook required and Flash Drive This course introduces the principles, techniques, and skills needed for scientific, technical, and business writing. This course is designed for technical students. (ETWR 1302)
ENVIRONMENTAL TECH
(EPCT)

EPCT 1301 Hazardous Waste Operations and Emergency Response (HAZWOPER) Training and Related Topics 3 Credits (3 Lec, 1 Lab)
This course covers minimum certification requirements in the Code of Federal Regulations (CFR) for a hazardous waste site worker as found in 29 CFR 1910.120 and 40 CFR 264.16. Students must make a grade of "C" or better in order to be eligible for HAZWOPER certification.
Prerequisite(s): EPCT 1307. Reading level 6, Writing level 6, Math level 6
Course Type: Technical

EPCT 1305 Environmental Regulations Overview 3 Credits (3 Lec, 0 Lab)
This course provides an introduction to the history of the environmental movement, including basic requirements for compliance with the environmental regulations.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

EPCT 1307 Introduction to Environmental Safety and Health 3 Credits (3 Lec, 0 Lab)
This course provides a historic overview of environmental safety and health. Emphasis is on the use of occupational safety and health codes.
Course Type: Technical

EPCT 1311 Introduction to Environmental Science 3 Credits (3 Lec, 0 Lab)
This course provides an overview of environmental science and current global concerns, and a brief history of environmental ethics, resource use, and conservation. It includes a discussion of fundamental principles of resource economics and environmental health.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

EPCT 1313 Contingency Planning 3 Credits (3 Lec, 0 Lab)
This course provides an introduction to the development of an emergency response contingency plan for a facility or community. Emphasis is on analyzing the hazards, writing and implementing the contingency plans, and evaluating the effectiveness of the contingency plan.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

EPCT 1341 Principles of Industrial Hygiene 3 Credits (3 Lec, 0 Lab)
This course covers concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. It includes a study of the control of occupational hazards and sample collection and evaluation methods.
Prerequisite(s): EPCT 1307, CHEM 1311 and CHEM 1111, and MATH 1314; Reading level 6, Writing level 6
Course Type: Technical
Learn the full range of auditing skills that will help you become a strong advocate in your company's effort to obtain maximum value from your commitment to ISO 14001:2004. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture based learning.

The Aerospace Auditor Transition Training is the course which has been mandated and sanctioned by the IAQG for all current AAS, AEAS, and AIEAs to meet the new training requirement for AS9100:2009 Revision C. This course is applicable and beneficial to internal auditors, implementation teams, OEMs, and non-aerospace auditors looking to become Aerospace auditors. The course is process-based to add value for those implementation members who desire to learn how to audit for effectiveness as well as compliance.

This course is designed to provide a step-by-step method to guide an organization in the implementation of an Energy Management System in accordance with the ISO 50001:2011 Energy Management Systems Standard. It has been developed to give the participants a set of tools that will allow them to design and implement an Energy Management System (EnMS) within their organizations. This course will provide a framework through the use of specially defined tools and activities so that the participant can immediately return to their organization and begin the process of developing and implementing their own Energy Management Systems (EnMS).

ISO 9001:2008 Internal Auditor Training is comprehensive cost effective and standard complaint. A complete roadmap for developing a quality system and preparing an organization for registration. This program is designed to be flexible and is applicable to all standards, including ISO 9000, ISO 14000, QS-9000, ISO?TS 16949, TL-9000 and AS9100. This training program teaches the skills required to implement an effective quality auditing process, including planning execution, and reporting. ISO 9001 Certified organizations will need to perform regularly schedule internal audits. This on-line program shows existing and new auditors how the system is working and how you can continue to improve it. The course delivers content and information needed to present an interactive training for the Internal Audit Team. Train auditors and give them practice with each step of the audit process as they progress.

Prerequisite(s): None This course will focus on identification and proper handling of hazardous materials per 29 CFR 1910.120 (q). This training will include the regulations, emergency situations, and notification procedures in emergency response plans, spill containment, and proper use of personal protective equipment.

A course in the transport of hazardous materials and dangerous goods to meet the requirements of the U.S. Department of Transportation Title 49 CFR, Sub Part H, Sections 172.700 - 172.704, commonly referred to as Docket HM - 126F. This docket sets the training requirements for employees and employers involved in all modes of transportation, including road, rail, aircraft, and marine vessels.
EYE CARE TECHNOLOGY (OPTS)

OPTS 1166 Ophthalmic Practicum I 1 Credit (0 Lec, 8 Lab)
This course covers practical general training and experiences in the workplace. The College with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary.
Course Type: Technical

OPTS 1167 Practicum - Opticianry/Ophthalmic Dispensing Optician 1 Credit (0 Lec, 1 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): OPTS 1501 and 1309.
Co-requisite(s): OPTS 2431
Course Type: Technical

OPTS 1191 Special Topics in Opticianry/Dispensing Optician 1 Credit (1 Lec, 1 Lab)
This course covers recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be taken twice to improve student proficiency.
Course Type: Technical

OPTS 1266 Practicum - Opticianry/Ophthalmic Dispensing Optician 2 Credits (0 Lec, 16 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): OPTS 1311, 2441
Course Type: Technical

OPTS 1267 Practicum Opticianry/Ophthalmic Dispensing Optician 2 Credits (0 Lec, 16 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): OPTS 1501, 1309, 2431, and 1167
Course Type: Technical

OPTS 1309 Ophthalmic Laboratory I 3 Credits (2 Lec, 3 Lab)
This course emphasizes the finishing portion (bench) of the fabrication of spectacles. Topics include mark-up, blocking, edging, beveling, impact resistance, tinting, insertion, and inspection of single vision and multifocal lenses.
Co-requisite(s): OPTS 1501
Course Type: Technical

OPTS 1311 Visual System 3 Credits (3 Lec, 0 Lab)
This is an overview of the visual system including the anatomy and physiology of the eye, related structures, and diseases.
Course Type: Technical

OPTS 1315 Basic Contact Lenses 3 Credits (2 Lec, 3 Lab)
This is an introduction to contact lens theory and practice. Topics include the history, development, and manufacture of contact lenses; lens materials, designs, fitting, and care techniques; and skill necessary for the accurate measurement of lens parameters.
Course Type: Technical

OPTS 1371 Anatomy and Physiology for Eye Care Technology 3 Credits (3 Lec, 0 Lab)
This course is an introduction to the normal structure and function of the human body including the understanding and the relationship of the body structures in maintaining homeostasis as it is related to ophthalmic medical personnel.
Course Type: Technical

OPTS 1392 Special Topics in Opticianry/Dispensing Optician 3 Credits (3 Lec, 1 Lab)
This course covers recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be taken twice to improve student proficiency.
Course Type: Technical

OPTS 1401 Ophthalmic Dispensing 4 Credits (3 Lec, 4 Lab)
This course is an introduction to the basic principles of frame selection, styling, refractive errors, lens design, the use of tools and instruments used to measure and make adjustments necessary to properly dispense spectacles.
Course Type: Technical

OPTS 1501 Ophthalmic Dispensing 5 Credits (3 Lec, 6 Lab)
This is an introduction to the basic principles of frame selection, styling, refractive errors, and lens design and to the use of tools and instruments used to measure and make adjustments necessary to properly dispense spectacles.
Course Type: Technical

OPTS 2167 Practicum Opticianry/Ophthalmic Dispensing Optician 1 Credit (0 Lec, 8 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): OPTS 1311, OPTS 1401, OPTS 1167
Course Type: Technical

OPTS 2266 Ophthalmic Practicum II 2 Credits (0 Lec, 16 Lab)
This course covers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student.
Prerequisite(s): OPTS 1166
Course Type: Technical

OPTS 2350 Ophthalmic Surgical Techniques 3 Credits (2 Lec, 3 Lab)
A continuation of Ophthalmic Techniques, this course introduces the student to aseptic and non-aseptic sterilization techniques used in the surgical field and provides knowledge and practice in scrubbing techniques used when assisting during ophthalmic surgical procedures.
Course Type: Technical
OPTS 2366 Practicum - Opticianry/Ophthalmic Dispensing Optician  3 Credits  (0 Lec, 24 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): OPTS 1311, 2441, 1166, 1266, 2445, and 2266
Course Type: Technical

OPTS 2431 Advanced Ophthalmic Dispensing  4 Credits  (2 Lec, 6 Lab)
This is an advanced study of the procedures necessary to dispense eyewear. Topics include lens aberrations, magnification, tilt, reflection, absorption and transmission, advanced lens materials, high-powered prescription considerations, and partial vision.
Prerequisite(s): OPTS 1501
Course Type: Technical

OPTS 2441 Ophthalmic Techniques  4 Credits  (2 Lec, 6 Lab)
This course covers presentation of information and practical training in the techniques necessary to properly assist the refractionist or eye physician. Topics include visual acuity assessments and performance of various diagnostic tests.
Course Type: Technical

OPTS 2445 Advanced Ophthalmic Techniques  4 Credits  (2 Lec, 6 Lab)
This is a continuation of Ophthalmic Techniques with an introduction to principles and techniques of various diagnostic evaluations. Topics include refractometry and retinoscopy, ophthalmic photography, applanation tonometry, and advanced clinical assessments. An overview of standardized tools prevalent in the field will be covered.
Prerequisite(s): OPTS 2441
Course Type: Technical

OPTS 15008 Adv. Ophthalmic Dispensing  8-14 Credits
OPTS 15009 Ophthalmic Practicum II  10 Credits
OPTS 41001 Ophthalmic Dispensing  8-14.4 Credits
OPTS 41005 Geometric Optics  4.8-12.8 Credits
OPTS 41009 Ophthalmic Laboratory I  4.8-12.8 Credits
OPTS 41011 The Visual System  4.8-9.6 Credits
OPTS 41015 Basic Contact Lenses  4.8-12.8 Credits
OPTS 41019 Vision Care Office Procedures  4.8-9.6 Credits
OPTS 41049 Ophthalmic Laboratory II  4.8-12.8 Credits
OPTS 41091 Special Topics in Opticianry/D  0.7-11.2 Credits
OPTS 41092 Special Topics in Optical Tech  0.7-11.2 Credits
OPTS 42031 Advanced Ophthalmic Dispensing  8-14.4 Credits
OPTS 42035 Advanced Contact Lenses  4.8-12.8 Credits
OPTS 42039 Ophthalmic Laboratory III  8-14.4 Credits
OPTS 42041 Ophthalmic Techniques  4.8-12.8 Credits
OPTS 42045 Advanced Ophthalmic Techniques  6.4-12.8 Credits
OPTS 42049 Ophthalmic Laboratory IV  8-14.4 Credits
OPTS 42050 Ophthalmic Surgical Techniques  4.8-12.8 Credits

OPTS 55000 Vision Care Office Procedures  4.8 Credits
Prerequisite(s): None. Overview of procedures used in an optical, optometric, or ophthalmological, office. Instruction on government, third party, and other managed care insurance claim forms, maintenance of patient records, safety regulations, correspondence and ethics. (OPTS 1319) Note: Textbook required.

OPTS 55001 Visual System  4.8 Credits
Prerequisite(s): None. Overview of the ophthalmic field including the anatomy and physiology of the eye, related structures and the visual system. The course includes: anatomical parts of the eye, adnexa and visual pathways; disorders and diseases of the eye; and clinical tests and diagnostic tools used to examine and detect various ocular health problems. (OPTS 1311). Note: Textbook required.

OPTS 55002 Advanced Ophthalmic Technician  12.8 Credits
Prerequisite(s): Division Approval. Principles and techniques of various diagnostic evaluations. Topics include refractometry and retinoscopy, ophthalmic photography, applanation tonometry, and advanced clinical assessments. An overview of standardized tools prevalent in the field will be covered. (OPTS 2445). Note: Textbooks required.

OPTS 55003 Ophthalmic Techniques  12.8 Credits
Prerequisite(s): High school diploma or GED. Presentation of information and practical training in the techniques necessary to properly assist the refractionist or eye physician. Topics include visual acuity assessments and performance of various diagnostic tests. (OPTS 2441) Note: Textbook required.
OPTS 55004  Optician  14.2 Credits
Prerequisite(s): Must be 18 and provide proof of high school diploma/GED by the class end date to be eligible for certification. Proof of negative TB skin test. Background check is required and is an additional student expense. Opticians work with optometrists and ophthalmologists in medical offices and retail environments filling prescriptions and dispensing eyewear. Students are involved in skill development designed to introduce the basic principles of frame selection, styling, refractive errors, lens design and the techniques required to measure, adjust and properly dispense spectacles. Emphasis is placed on the finishing portion of the fabrication of spectacles. This course includes 7 hours of intensive review to improve student proficiency on the American Board of Optometry (ABO) National certification Exam. An additional 7 hours will assist the student with resume and job interview skills. Note: Includes textbook, uniform shirt, and ID badge. Must also enroll in the Optician - Laboratory course.

OPTS 55005  Optician-Laboratory  12.8 Credits
Prerequisite(s): Must be 18 and provide proof of high school diploma/GED by the class end date to be eligible for certification. Proof of negative TB skin test. Background check is required and is an additional student expense. This course is a supervised, work-based experience providing students with simulated and actual laboratory settings. Students will apply the theory, skills and concepts learned in the Optician course. Specific learning objectives are developed by the faculty. Note: Must also enroll in the Optician course. Materials provided.

OPTS 55007  Ophthalmic Dispensing  11.2 Credits
Prerequisite(s): High school diploma or GED. Department approval required. Note: Textbook is required. This course is an introduction to the basic principles of frame selection, styling, refractive errors, lens design, the use of tools and instruments used to measure and make adjustments necessary to properly dispense spectacles. (OPTS 1401)
FIRE PROTECTION TECH
(FIRS)

FIRS 1301 Firefighter Certification I 3 Credits (2 Lec, 3 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 16 lecture hours, 48 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1313 Firefighter Certification II 3 Credits (3 Lec, 1 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 32 lecture hours, 16 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1319 Firefighter Certification IV 3 Credits (2 Lec, 3 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 32 lecture hours, 48 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1323 Firefighter Certification V 3 Credits (2 Lec, 4 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 32 lecture hours, 64 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1329 Firefighter Certification VI 3 Credits (3 Lec, 1 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 48 lecture hours, 16 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1333 Firefighter Certification VII 3 Credits (1 Lec, 5 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 16 lecture hours, 80 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1407 Firefighter Certification II 4 Credits (2 Lec, 5 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 32 lecture hours, 48 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1423 Firefighter Certification V 4 Credits (3 Lec, 3 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 48 lecture hours, 48 hours of skills development. Firefighter Training Academy.
Course Type: Technical

FIRS 1433 Firefighter Certification VII 4 Credits (2 Lec, 5 Lab)
This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. ***THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION*** 32 lecture hours, 80 hours of skills development. Firefighter Training Academy.
Course Type: Technical

Course Type: Technical

FIRS 41030 Fire Brigade 0.7-4.8 Credits
FIRS 41091 Confined Space Resc/Emerg Resp 0.7-1.12 Credits
FIRS 55000 Technical Rope Rescue 6.4 Credits
(FIRT 1370)
FIRS 55001  Basic Fire Fighting (BST Part 1)  1.6 Credits
Prerequisite(s): None Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. The course is open primarily to entry-level mariners and preferably should be given before they take up employment in sea-going vessels. There are no educational requirements. The mariner must be in good health. The student should have the agility, strength and flexibility to maintain balance on a moving deck, rapidly don firefighting personal protection equipment, capable of physical labor, climbing vertical ladders, handling moderate weights (from 30 to 60 pounds), and capable of hauling/moving 50 to 100 foot lengths of charged fire hoses. Pursuant to National Maritime Center Policy Letter 11-02.

FIRS 55002  Industrial Fire Brigade  1.6 Credits
This course provides emergency response personnel with practical training under real fire conditions.

FIRS 55003  Structural Firefighting  2.4 Credits
Designed as an introductory course covering the basics of structural firefighting. The student will be instructed in the behavior of fire, prevention and suppression techniques and equipment.

FIRS 55004  Structural Firefighting Refresher  0.8 Credits
This course is a refresher for the Structural Firefighting.
FIRE PROTECTION TECH (FIRT)

FIRT 1303 Fire and Arson Investigation 3 Credits (3 Lec, 1 Lab)
This is an in-depth study of basic fire and arson investigation practices, with an emphasis on fire behavior principles related to fire cause and origin determination. This includes 48 lecture hours and 16 hours of skills development.
Course Type: Technical

FIRT 1309 Fire Administration 3 Credits (3 Lec, 0 Lab)
This is an introduction to the organization and management of a fire department and the relationship of government agencies to the fire service, with an emphasis on fire service leadership from the perspective of the company officer. It includes 48 lecture hours.
Course Type: Technical

FIRT 1315 Hazardous Materials 3 Credits (3 Lec, 1 Lab)
This is a study of the chemical characteristics and behavior of various materials. Topics include storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. It is the equivalent to Hazardous Materials Operations Level Training, and includes 48 lecture hours, and 16 hours of skills development.
Course Type: Technical

FIRT 1319 Firefighter Health and Safety 3 Credits (3 Lec, 0 Lab)
This is a study of firefighter occupational safety and health in emergency and non-emergency situations. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. It includes 48 lecture hours.
Course Type: Technical

FIRT 1327 Building Construction for the Fire Service 3 Credits (3 Lec, 0 Lab)
This course covers the exploration of building construction and design related to fire spread suppression in various structures, and examination of potential hazards resulting from construction practices and materials. The student will identify types of building construction: recognize hazards associated with construction practices; identify fire resistive levels of building materials; and recognize signs of potential structural collapse. It includes 48 lecture hours.
Course Type: Technical

FIRT 1338 Fire Protection Systems 3 Credits (3 Lec, 0 Lab)
This course is a study of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. Includes 48 lecture hours.
Course Type: Technical

FIRT 1342 Fire Officer I 3 Credits (3 Lec, 1 Lab)
Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION**
Course Type: Technical

FIRT 1343 Fire Officer II 3 Credits (3 Lec, 1 Lab)
Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer II certification. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION**
Course Type: Technical

FIRT 1345 Hazardous Materials II 3 Credits (3 Lec, 1 Lab)
This is an in-depth study of mitigation practices and techniques to effectively control hazardous materials spills and leaks. It is the equivalent to Hazardous Materials Technician Level Training, and includes 48 lecture hours, and 16 hours of skills development.
Course Type: Technical

FIRT 1349 Fire Administration II 3 Credits (3 Lec, 0 Lab)
This is an in-depth study of fire service management as pertaining to budgetary requirements, administration, organization of divisions within the fire service, and relationships between the fire service and outside agencies. It includes 48 lecture hours.
Prerequisite(s): FIRT 1309
Course Type: Technical

FIRT 1370 Technical Rope Rescue I 3 Credits (2 Lec, 3 Lab)
This is an in-depth study of Technical Rope Rescue including extensive skills development. Upon successful completion of this course students should be able to identify, describe, and demonstrate rope rescue and confined space rescue procedures at the Technical Rescuer-Level I level. The content of this course meets and/or exceeds the job performance requirements specified in National Fire Protection Association 1006-Standard for Technical Rescue Professional Qualifications, 2008 Edition including the specialty areas of rope rescue and confined space rescue. This course may be repeated in order to maintain student skill proficiency.
Course Type: Technical

FIRT 1371 Technical Rope Rescue II 4 Credits (3 Lec, 3 Lab)
This course is one in a series of three courses required for Fire Inspector certification. Meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Inspector I. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION**
Course Type: Technical

FIRT 1372 Technical Rope Rescue III 4 Credits (2 Lec, 3 Lab)
This course is one in a series of three courses required for Fire Inspector II and Plan Examiner I. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION**
Course Type: Technical

FIRT 2112 Hazardous Materials Incident Commander 1 Credit (1 Lec, 1 Lab)
This course meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Hazardous Materials Incident Commander certification. **THIS COURSE MAY BE OFFERED ONLY BY AN INSTITUTION CERTIFIED AS TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION**
Course Type: Technical
FIRT 2305 Fire Instructor I 3 Credits (3 Lec, 0 Lab)
This course prepares fire and emergency services personnel to deliver instruction from a prepared lesson plan, including the use of instructional aids and evaluation instruments to meet the Texas Commission on Fire Protection requirements for Fire Instructor I certification. It includes 48 lecture hours.
Course Type: Technical

FIRT 2309 Firefighting Strategies and Tactics I 3 Credits (3 Lec, 0 Lab)
This course covers analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of manpower and equipment to mitigate the emergency. It includes 48 lecture hours.
Course Type: Technical

FIRT 2331 Firefighting Strategies and Tactics II 3 Credits (3 Lec, 0 Lab)
This course is a continuation of Firefighting Strategies and Tactics I with an emphasis on use of incident command in large scale command problems and other specialized fire problems. It includes 48 lecture hours.
Prerequisite(s): FIRT 1311

FIRT 2333 Fire and Arson Investigation II 3 Credits (3 Lec, 1 Lab)
This course is a continuation of Fire and Arson Investigation I. Topics include reports, courtroom demeanor, and expert witnesses. Forty-eight lecture hours. Sixteen hours of skills development.
Course Type: Technical

FIRT 2345 Hazardous Materials III 3 Credits (3 Lec, 1 Lab)
This course is a continuation of Hazardous Materials II. Topics include radioactive materials and radiation; poisons and toxicology; cryogenics; oxidizers; corrosives; flammable solids; hazards of Class A fuels, plastics and organic and inorganic peroxides and water reactivity, and polymerization and polymerizing substances. It includes 48 lecture hours and 16 hours of skills development.
Course Type: Technical

FIRT 2351 Company Fire Officer 3 Credits (3 Lec, 0 Lab)
This is a capstone course covering fire ground operations and supervisory practices. It includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties and 48 lecture hours.
Course Type: Technical

FIRT 2356 Fire Officer III 3 Credits (3 Lec, 1 Lab)
This course meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer III certification. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.**
Course Type: Technical

FIRT 2359 Fire Instructor III 3 Credits (3 Lec, 1 Lab)
This course meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor III certification. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED AS A TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION.**
Course Type: Technical

FIRT 2370 Technical Rope Rescue II 3 Credits (2 Lec, 3 Lab)
This is an in-depth study of Technical Rope Rescue including extensive skills development. Upon successful completion of this course, students should be able to identify, describe, and demonstrate rope rescue and confined space rescue procedures at the Technical Rescuer-Level I level. The content of this course meets and/or exceeds the job performance requirements specified in National Fire Protection Association 1006-Standard for Technical Rescuer Professional Qualifications, 2008 Edition including the specialty areas of rope rescue and confined space rescue. This course may be repeated in order to maintain student skill proficiency.
Prerequisite(s): FIRT 1370

FIRT 55000 Methods of Teaching 4.8 Credits
Public safety personnel learn how to present safety training using lesson plans, effectivley use training aids, set the learning environment to maximize learning and maintain training records. (FIRT 1355)

FIRT 55001 Fire and Arson Investigation I 6.4 Credits
Students will learn fire and arson investigation practices with fire behavior principles related to fire cause and origin determination. (FIRT 1303)

FIRT 55002 Fire and Arson Investigation II 6.4 Credits
Students will study fire investigatin techniques and defense of findings in a court room setting. (FIRT 2323)

FIRT 55003 Technical Rope Rescue 1 8 Credits
Prerequisite(s): None Note: Textbook and mechanic-type gloves are required. Knee pads and sunscreen are highly recommended. Physical Requirements: Must be able to walk, crawl, squat, bend, lift and assist with at least 50 pounds. A Wavier of Liability is required and will be signed on the first day of class. Your current photo ID is required to verify the wavier signature. For questions - Contact 281-476-1834. This is an in-depth study of Technical Rope Rescue including extensive skills development. Upon successful completion of this course students should be able to identify, describe and demonstrate rope rescue and confined space rescue procedures at the Technical Rescuer-Level I level. The content of this course meets and/or exceeds the job performance requirements specified in National Fire Protection Association 1006-Standard for the Technical Rescuer Professional Qualifications, 2008 Edition including the specialty areas of rope rescue and confined space rescue. This course may be repeated in order to maintain student skill proficiency.
FRENCH (FREN)

FREN 1411  Beginning French I  4 Credits  (3 Lec, 2 Lab)
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): Reading level 6
Course Type: Academic

FREN 1412  Beginning French II  4 Credits  (3 Lec, 2 Lab)
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): FREN 1411
Course Type: Academic

FREN 2311  Intermediate French I  3 Credits  (3 Lec, 0 Lab)
This course is designed to give the student who has completed FREN 1411 and 1412 increased fluency and confidence in the use of the French language. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): FREN 1411-1412
Course Type: Academic

FREN 2312  Intermediate French II  3 Credits  (3 Lec, 0 Lab)
This course is a continuation of FREN 2311. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): FREN 2311
Course Type: Academic
GEOGRAPHY (GEOG)

GEOG 1301  Physical Geography  3 Credits  (3 Lec, 0 Lab)
This course introduces students to the processes that drive Earth's physical systems. Students will explore the relationships among these physical systems, with emphasis on weather and climate, water, ecosystems, geologic processes and landform development, and human interactions with the physical environment.
Prerequisite(s): Reading level 6
Course Type: Academic

GEOG 1302  Human Geography  3 Credits  (3 Lec, 0 Lab)
This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include globalization, population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

GEOG 1303  World Regional Geography  3 Credits  (3 Lec, 0 Lab)
This course is an introduction to the world's major regions seen through their defining physical, social, cultural, political, and economic features. These regions are examined in terms of their physical and human characteristics and their interactions. The course emphasizes relations among regions on issues such as trade, economic development, conflict, and the role of regions in the globalization process.
Prerequisite(s): Reading level 6 and Writing level 6.
Course Type: Academic
GEOL 1101  Earth Sciences for Non-Science Majors I (lab)  1 Credit  (0 Lec, 3 Lab)
This introductory lab course provides a survey of astronomy, geology, oceanography, and meteorology for non-science majors.
Prerequisite(s): Reading level 7, Writing level 7, Math level 6;
Co-requisite(s): GEOL 1301
Course Type: Academic

GEOL 1103  Physical Geology (lab)  1 Credit  (0 Lec, 3 Lab)
This laboratory-based course accompanies GEOL 1303, Physical Geology. Laboratory activities will cover methods used to collect and analyze earth science data. Field trip(s) may be required. Prerequisite Reading level 7;
Co-requisite(s): GEOL 1103
Course Type: Academic

GEOL 1104  Historical Geology (lab)  1 Credit  (0 Lec, 3 Lab)
This laboratory-based course accompanies GEOL 1304, Historical Geology. Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. Field trip(s) may be required.
Prerequisite(s): GEOL 1303 1103, Reading level 7;
Co-requisite(s): GEOL 1104
Course Type: Academic

GEOL 1105  Environmental Science (lab)  1 Credit  (0 Lec, 3 Lab)
This laboratory based course accompanies GEOL 1305, Environmental Science (lecture). Activities will cover methods used to collect and analyze environmental data. Field trip(s) are required.
Prerequisite(s): Reading level 7;
Co-requisite(s): GEOL 1105
Course Type: Academic

GEOL 1301  Earth Sciences for Non-Science Majors I (lecture)  3 Credits  (3 Lec, 0 Lab)
This introductory lecture course provides a survey of astronomy, geology, oceanography, and meteorology for non-science majors.
Prerequisite(s): Reading level 7, Writing level 7, Math level 6:
Co-requisite(s): GEOL 1101
Course Type: Academic

GEOL 1303  Physical Geology (lecture)  3 Credits  (3 Lec, 0 Lab)
This lecture course is an introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Field trip(s) may be required.
Prerequisite(s): Reading level 7;
Co-requisite(s): GEOL 1103
Course Type: Academic

GEOL 1304  Historical Geology (lecture)  3 Credits  (3 Lec, 0 Lab)
This lecture course is a comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Field trip(s) may be required.
Prerequisite(s): GEOL 1303 1103, Reading level 7;
Co-requisite(s): GEOL 1104
Course Type: Academic

GEOL 1305  Environmental Science (lecture)  3 Credits  (3 Lec, 0 Lab)
This course is a survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Field trip(s) are required.
Prerequisite(s): Reading level 7;
Co-requisite(s): GEOL 1105
Course Type: Academic

GEOL 2389  Academic Cooperative  3 Credits  (1 Lec, 8 Lab)
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.
Prerequisite(s): Eight hours of geology; Reading level 7, Writing level 7, Math level 8
Course Type: Academic
GERMAN (GERM)

GERM 1411  Beginning German I  4 Credits  (3 Lec, 2 Lab)
This is a fundamentals skills course in listening comprehension, speaking, reading, and writing German. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): Reading level 6
Course Type: Academic

GERM 1412  Beginning German II  4 Credits  (3 Lec, 2 Lab)
This is a fundamentals skills course in listening comprehension, speaking, reading, and writing. It includes basic vocabulary, grammatical structures, and culture.
Prerequisite(s): GERM 1411
Course Type: Academic

GERM 2311  Intermediate German I  3 Credits  (3 Lec, 0 Lab)
This course is designed to give the student who has completed GERM 1411 and 1412 increased fluency and confidence in the use of the German language. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): GERM 1411-1412
Course Type: Academic

GERM 2312  Intermediate German II  3 Credits  (3 Lec, 0 Lab)
This course is a continuation of GERM 2311. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): GERM 2311
Course Type: Academic
GOVERNMENT (GOVT)

GOVT 2107 Federal and Texas Constitutions 1 Credit (1 Lec, 0 Lab)
This course is a study of the United States and state constitutions, with special emphasis on Texas. Prerequisites: Reading level 7 and Writing level 7, and Prerequisite: GOVT 2302 and co-requisite GOVT 2305, or Prerequisite: GOVT 2302 and co-requisite GOVT 2306.
Prerequisite(s): By permission only. Enrollment limited to students who have already completed a minimum of 6 SCH of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with §TEC 51.301. Reading level 7 and Writing level 7, and GOVT 2302 and co-requisite GOVT 2305, or GOVT 2302 and co-requisite GOVT 2306.
Course Type: Academic

GOVT 2304 Introduction to Political Science 3 Credits (3 Lec, 0 Lab)
This course is an introductory survey of the discipline of political science focusing on the scope, and methods of the field and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

GOVT 2305 Federal Government (Federal Constitution and Topics) 3 Credits (3 Lec, 0 Lab)
This course is an introductory survey of the United States political system. Topics include origin and development of the U.S. Constitution; structure and powers of the national government including the legislative, executive, and judicial branches; federalism; political participation; the national election process; public policy; civil rights and civil liberties.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

GOVT 2306 Texas Government (Texas Constitution and Topics) 3 Credits (3 Lec, 0 Lab)
This course is an introductory survey of the Texas political system. Topics include origin and development of the Texas Constitution; structure and powers of state and local government; federalism and inter-governmental relations; political participation; the election process; public policy; and the political culture of Texas.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

GOVT 2311 Mexican American and Latino/a Politics 3 Credits (3 Lec, 0 Lab)
The study of Mexican American and Latino/a politics within the American political experience. Topics include historical, cultural, socioeconomic, and constitutional issues that pertain to the study of Mexican Americans and other Latino/a populations in the United States. Other topics such as political participation, governmental institutions, electoral politics, political representation, demographic trends, and other contemporary public policy debates will also be addressed.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

GOVT 2389 Academic Cooperative 3 Credits (1 Lec, 8 Lab)
This is an instructional program designed to integrate on-campus study with practical hands-on experience in government. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic
HEALTH INFO MANAGEMENT (HITT)

HITT 1301 Health Data Content and Structure 3 Credits (2 Lec, 2 Lab)
This is an introduction to systems and processes for collecting, maintaining, and disseminating primary and secondary health related information including content of health record, documentation requirements, registries, indices, licensing, regulatory agencies, forms, and screens.
Course Type: Technical

HITT 1305 Medical Terminology I 3 Credits (3 Lec, 0 Lab)
This is a study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties.
Course Type: Technical

HITT 1307 Cancer Data Management I 3 Credits (3 Lec, 0 Lab)
This introduction to Cancer Data Management includes cancer program requirements, the American College of Surgeons Cancer Program Survey process, and an overview of data collection/retrieval-abstracting coding, staging and reporting.
Prerequisite(s): Reading Level 7, Writing Level 7, Math Level 8; HITT 1305, BIOL 2404, HITT 2371, HITT 1311

Course Type: Technical

HITT 1311 Health Information Systems 3 Credits (2 Lec, 2 Lab)
This is an introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health.
Co-requisite(s): ITSC 1309 or BCIS 1305.
Course Type: Technical

HITT 1341 Coding and Classification Systems 3 Credits (2 Lec, 3 Lab)
This course covers the fundamentals of coding rules, conventions and guidelines using clinical classification systems.
Prerequisite(s): HITT 1305
Course Type: Technical

HITT 1342 Ambulatory Coding 3 Credits (2 Lec, 2 Lab)
This course covers the fundamentals of ambulatory coding rules, conventions, and guidelines.
Prerequisite(s): HITT 1305
Course Type: Technical

HITT 1345 Health Care Delivery Systems 3 Credits (3 Lec, 0 Lab)
This is an introduction to organization, financing, and delivery of health care services, accreditation, licensure, and regulatory agencies.
Prerequisite(s): Reading level 7, Writing level 7.
Course Type: Technical

HITT 1353 Legal and Ethical Aspects of Health Information 3 Credits (3 Lec, 0 Lab)
This course covers the concepts of privacy, security confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information.
Course Type: Technical

HITT 1360 Clinical-Health Information/Medical Records Technology/Technician 3 Credits (0 Lec, 9 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 1361 Clinical-Cancer Data Management 3 Credits (0 Lec, 9 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the Certified Tumor Registrar.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 1374 Anatomy and Physiology 3 Credits (3 Lec, 1 Lab)
This is a general overview of the normal structure and function of human body including an introduction to the relationship of the body systems in maintaining homeostasis.
Course Type: Technical

HITT 1377 Clinical-Billing and Coding 3 Credits (0 Lec, 9 Lab)
This is a supervised learning experience in a health care facility enabling the student to apply skills in basic billing and coding procedures and practices. Emphasis is placed on students achieving entry-level proficiency in billing and coding medical records and physicians office diagnoses and procedures, and the application of policies, standards, and guidelines.
Course Type: Technical

HITT 1378 Medical Insurance 3 Credits (3 Lec, 0 Lab)
This course includes instruction to inform and clarify medical insurance reimbursement via coding and completion of applicable insurance forms. Accurate ICD-9-CM/ICD-10-CM and ICD-10-PCS; and CPT coding to be used for completion of insurance forms to governmental agencies, insurance companies, and third party payors.
Course Type: Technical

HITT 2145 Billing Certification Exam Review 1 Credit (1 Lec, 0 Lab)
This course is a review of coding competencies and skills in preparation for a coding certification exam; and a review of billing competencies and skills in preparation for a billing certification exam.
Course Type: Technical

HITT 2245 Coding Certification Exam Review 2 Credits (2 Lec, 0 Lab)
This is a review of the coding competencies and skills in preparation of a coding certification exam.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 2249 RHIT Competency Review 2 Credits (1 Lec, 2 Lab)
This is a review of Health Information Technology (HIT) competencies, skills, and knowledge.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

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HITT 2307 Cancer Data Management II 3 Credits (3 Lec, 0 Lab)
This is a continuation of Cancer Data Management I to include the application of cancer registry data.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8; HITT 1307,
Co-requisite(s): HITT 2370
Course Type: Technical

HITT 2335 Coding and Reimbursement Methodologies 3 Credits (2 Lec, 2 Lab)
This course covers advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8; and HITT 1341
Course Type: Technical

HITT 2339 Health Information Organization and Supervision 3 Credits (3 Lec, 0 Lab)
This course covers the principles of organization and supervision of human, financial, and physical resources.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 2343 Quality Assessment and Performance Improvement 3 Credits (3 Lec, 0 Lab)
This is a study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues, and approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 2346 Advanced Medical Coding 3 Credits (2 Lec, 2 Lab)
This course covers the advanced concepts of CPT coding rules, conventions, and guidelines in complex case studies. Includes investigation of government regulations and changes in health care reporting.
Course Type: Technical

HITT 2361 Clinical-Health Information/Medical Records Technology/Technician 3 Credits (0 Lec, 9 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8
Course Type: Technical

HITT 2370 Cancer Data Management III 3 Credits (3 Lec, 0 Lab)
This is an advanced level course in Cancer Data Management to include Cancer Program requirements, the American College of Surgeons guidelines, and heavy concentration in abstracting, coding, staging and State and National reporting requirements.
Prerequisite(s): Reading Level 7, Writing level 7, Math level 8; HITT 1307.
Co-requisite(s): HITT 2307
Course Type: Technical

HITT 2371 Pathophysiology and Pharmacology 3 Credits (2 Lec, 2 Lab)
This course covers the study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and physiological reactions to diseases and injuries. Pharmacology is the study of drug uses, effects, and actions.
Course Type: Technical

HITT 35003 Medical Billing & Coding 8 Credits
See Comments

HITT 41001 Health Data Content and Structure 4.8-9.6 Credits
HITT 41005 Medical Terminology 3.2-9.6 Credits
HITT 41009 Introduction to Health Information 1.6-4.8 Credits
HITT 41013 Insurance Coding 1.6-4.8 Credits
HITT 41017 Health Information Supervision 1.6-4.8 Credits
HITT 41041 Coding and Classification Systems 4.8-9.6 Credits
HITT 41042 Ambulatory Coding 4.8-9.6 Credits
HITT 41053 Legal and Ethical Aspects of Health Information 3.2-4.8 Credits
HITT 41091 Special Topics in Health Information 0.7-11.2 Credits
HITT 42031 Medical Terminology - Advanced 3.2-9.6 Credits
HITT 42039 Health Information Organization 3.2-4.8 Credits
HITT 42046 Advanced Medical Coding 3.2-9.6 Credits
HITT 42049 RHIT Competency Review 1.6-8 Credits
HITT 55001 Medical Billing and Coding Specialist 9 Credits
Prerequisite(s): Successful completion of Medical Office Professional, or prior medical office experience/training. Call 281-542-2067 for experience waiver form. Skilled diagnostic coding is recognized as one of the top growth occupations. You will learn how to analyze medical records and assign correct diagnostic and procedural codes using ICD-9, CPT, and HCPCS. You will learn proper procedural coding of insurance forms for use in the physician's office, emergency department, out-patient and inpatient services. Note: Textbook required.

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HITT 55002  Certified Medical Insurance Specialist  2.4 Credits
Prerequisite(s): Two years of medical office experience recommended. This course teaches experienced reimbursement staff how to reduce errors and improve the practice paycheck with accurate and timely claim submissions. Learn what policies the practice must have in place to ensure adequate insurance information is obtained. Pre-authorization and pre-certification, Advance Beneficiary Notices, co-payments and deductibles will be covered and practice sets from a wide range of medical situations are included. The CMIS exam is also included and will be administered the last class day. *This course of study prepares candidates to be certified. Candidates become "Certified" by passing the required certifying agency exam. Note: Student must provide current editions of CPT, ICD-9-CM Vols I II, HCPCS manuals, and a medical dictionary. Course materials provided.

HITT 55003  Certified Coder Boot Camp  4 Credits
Prerequisite(s): One year of coding experience required. Note: Student must provide current editions of CPT, ICD-9-CM Vols I II, HCPCS manuals, and a medical dictionary. Other course materials provided. This 40-hour boot camp reviews primary coding rules and principles, along with a medical terminology section designed exclusively for coders. Coding exercises will be completed both in class and as homework exercises. You will learn how to master advanced coding issues, how to deal with modifiers, ancillary services, and a number of challenging coding scenarios. Includes the AAPC CPC Certification Exam which will be administered within 30 days of the last class day. *This course of study prepares candidates to be certified. Candidates become "Certified" by passing the required certifying agency exam.

HITT 55004  Medical Terminology Introduction  4.8 Credits
Prerequisite(s): None. Introduction to medical terminology by studying word origin and structure through prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. (HITT 1305). Note: Textbook required.

HITT 55005  AAPC Prof. Medical Coding Curriculum for CPC Certification  9 Credits
Prerequisite(s): Successful completion of Medical Office Professional or prior medical office/coding experience. Call for waiver info, 281-542-2058, 2067 or 2059. Note: Includes AAPC textbooks, AAPC Membership and CPC exam. You must bring your own current CPT and ICD-10 and HCPCS Coding Manuals. The AAPC's Professional Medical Coding Curriculum is developed to present the latest information related to medical or insurance reimbursement. You will learn the theory of coding, gain an understanding of the coding fundamentals and then incorporate this learning by using the lab book to work coding reports. The cost of the CPC certification exam is included and will be administered the Saturday after the last class day.

HITT 55006  Electronic Health Record: What, When, How?  2.4 Credits
Prerequisite(s): Working knowledge of health information and/or medical records. The electronic health record (HER) is quickly becoming a critical area for health information professionals. This class will address your understanding of implementation issues, potential pitfalls, project management tools, components, terminology, and transition steps. You will gain a good grasp of electronic health record best practices and how to successfully function in a hybrid environment. Note: Textbook required.

HITT 55007  CPT Coding Workshop  0.8 Credits
Prerequisite(s): Coding experience/training recommended. This workshop is designed for all medical office personnel who participate in coding or billing. The course is beneficial for medical professionals and consultants with no formal coding training, and anyone seeking additional training in accordance with a compliance plan. This course includes EM coding and self-audit tools that will help participants learn how to uncover potential problem areas. Earns 6 CEU's for PMI certification. Note: Materials provided; please bring current CPT Manual to class.

HITT 55008  ICD-9-CM Coding Workshop  0.8 Credits
This course explains the benefits of proper ICD-9-CM coding including accurate reimbursement, fewer rejected claims, and reduced risk of fines, sanctions and penalties from audit. This fast paced workshop provides instruction and hands-on exercises to train staff in the correct use of ICD-9-CM. Earns 6 CEU's for PMI certification. Prerequisite(s): Coding experience/training recommended Note: Materials provided; please bring current ICD-9-CM Volumes I II to class.

HITT 55009  Chart Auditing Workshop  0.8 Credits
Prerequisite(s): Experience/training in medical records/coding. Self-audits protect the medical practice from inaccurate reimbursement and potential allegations of fraud and abuse. Audit your charts based on fact and uncover missed revenue, or instances where under-documentation created improper code selections. This essential program will give you the information you need to implement your own internal audit program. Make sure your practice is receiving complete and accurate reimbursement. This course includes chart auditing forms, templates and hands-on exercises. Earns 6 CEU's for PMI certification. Note: Materials included.

HITT 55011  ST: AAPC for CPC Cert  9 Credits
HITT 55013  Coding by Medical Specialty Refresher  0.8 Credits
Prerequisite(s): Employees with Coding Experience. This class is a customized review of coding issues that are faced by specialized medical practices. At the conclusion of the training, trainees should be able to recognize medical terminology related to practice specialization; use appropriate abbreviations and definitions; and apply appropriate coding for services commonly rendered in their practice. Note: Materials provided

HITT 55014  ICD-10 Coding Workshop  1.6 Credits
Prerequisite(s): Prior Coding Experience. Note: Call 281-542-2058 for textbook info and additional details. This course will provide a comprehensive view of the transition of ICD-9 to ICD-10 coding practices and offer hands-on coding practice. Bring a current copy of the ICD-9 and ICD-10 coding books for reference. This course is approved by the AAPC for 16 CEU's.

HITT 55016  Insurance and Check-in Procedures Training  0.7 Credits
Prerequisite(s): None. This course will teach office staff the best practice methods with regard to insurance and check in procedures. At the conclusion of the training, trainees will be able to use telephone etiquette for doctors' offices; practice teamwork and time management to increase the efficiency of the check in process; follow HIPAA confidentiality rules; increase the efficiency of billing and collections processes; and initiate contact with insurance companies. Note: Materials Provided.
HITT 55021  Collections Billing Charging Checkout  0.7 Credits
Prerequisite(s): None. This is a basic class for the staff involved in the final step of a medical visit; the checkout; where patients close out their office visit with payment, schedule follow-up appointments; and more. At the conclusion of the training, trainees will be able to: collect the correct co-payments; set up referral appointments; set up appropriate follow up appointment for the patient at the current doctor; gather accurate information; contact insurance caregivers to get approval of additional charges; collect co-insurance and deductibles from patients; work with the back office of the medical practice; address challenging patient behavior; make appropriate scheduling decisions; and verify insurance and handle post-authorization. Note: Materials Provided.

HITT 55022  Medical Office Patient Procedures  0.8 Credits
Prerequisite(s): None. This class will train office employees in professional and effective techniques for handling office processes. It will employ a pre- and post-test to establish mastery on the part of the trainees. At the conclusion of the training, trainees will be able to: deal effectively with patients; protect patient privacy; listen actively and constructively; and resolve problems for patients. Note: Materials Provided.

HITT 55023  Medical Collection Review  0.8 Credits
Prerequisite(s): None. This class will focus on collecting co-pays, deductibles, self pays, and insurance balances. At the conclusion of the training, trainees will be able to: follow appropriate steps before beginning collection processes on an account; implement new policies on payment options and collections; educate patients effectively on payment policies; set effective collections benchmarks and goals; develop responsibility statements for all patients; and follow procedures for obtaining accurate patient information. Note: Materials Provided.

HITT 55024  Medical Office Managers Certification Review  0.8 Credits
Prerequisite(s): None. This course prepares office managers to take the exam for Certified Medical Office Managers. At the conclusion of the training, trainees will be able to: apply guidelines for interviewing and hiring employees; follow state and federal laws in regard to wage and salary administration; practice prudent risk management in the operation of the medical office; practice prudent financial management in the operation of the medical office; and demonstrate understanding of the content listed above in preparation for the certification exam. Note: Materials Provided.

HITT 55025  Medical Terminology Review  0.8 Credits
Prerequisite(s): None. This course covers an introduction and explanation of understanding of the use of correct medical terminology. The course will be customized to include terms that are utilized by the specific practice with regard to their specialty. At the conclusion of the training, trainees will be able to: use correct medical terminology, including correct references to anatomy and physiology; use basic coding accurately; provide medical necessity explanations; follow up evidence of benefits and claims appropriately; and use modifiers correctly. Note: Materials Provided.

HITT 55026  ST: Medical Terminology  4 Credits
Prerequisite(s): None. Introduction to medical terminology by studying word origin and structure through prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. (HITT 1305). Note: Textbook included.

HITT 55027  Healthcare Bridge Course  3.6 Credits
Note: Materials provided. This contextualized basic skills course focuses on healthcare education, terminology, math requirements and soft skills such as group work and oral communications, all in a health career context.
HEALTH PROFESSIONS (HPRS)

HPRS 1101 Introduction to Health Professions 1 Credit (1 Lec, 0 Lab)
This course provides an overview of roles of various members of the health care system, educational requirements, and issues affecting the delivery of health care.
Course Type: Technical

HPRS 1105 Medical Law/Ethics for Health Professions 1 Credit (1 Lec, 0 Lab)
This course is an introduction to the relationship between legal aspects and ethics associated with the health care field. Emphasis on the ethical and legal responsibilities of health care professionals.
Course Type: Technical

HPRS 1106 Essentials of Medical Terminology 1 Credit (1 Lec, 0 Lab)
This course is a study of medical terminology, word origin, structure and application.
Course Type: Technical

HPRS 1201 Introduction to Health Professions 2 Credits (2 Lec, 0 Lab)
This course is an overview of roles of various members of health care system, educational requirements, and issues affecting the delivery of health care.
Course Type: Technical

HPRS 1202 Wellness and Health Promotion 2 Credits (2 Lec, 0 Lab)
This course provides an overview of wellness theory and its application throughout the life span. Focus is on attitude development, impact of cultural beliefs, and communication of wellness.
Co-requisite(s): FITT 2301.
Course Type: Technical

HPRS 1204 Basic Health Profession Skills - Sonography 2 Credits (2 Lec, 1 Lab)
This course is a study of the concepts that serve as the foundation for health profession courses, including client care and safety issues, basic client monitoring, and health documentation methods.
Course Type: Technical

HPRS 1206 Essentials of Medical Terminology 2 Credits (2 Lec, 0 Lab)
This course is a study of medical terminology, word origin, structure, and application.
Course Type: Technical

HPRS 2200 Pharmacology for Health Professions 2 Credits (2 Lec, 0 Lab)
This is a study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of doses.
Course Type: Technical

HPRS 2210 Basic Health Profession Skills II 2 Credits (1 Lec, 4 Lab)
This course builds on previously acquired knowledge and skills relevant to the professional development of the student. Lecture and simulated laboratory experiences prepare the student to perform patient care utilizing critical thinking and advanced clinical skills.
Prerequisite(s): OPTS 1311 and OPTS 2445.
Course Type: Technical

HPRS 2301 Pathophysiology 3 Credits (3 Lec, 0 Lab)
This is a study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and physical and psychological reactions to diseases and injuries.
Course Type: Technical

HPRS 2302 Medical Terminology for Allied Health 3 Credits (3 Lec, 0 Lab)
This course is a study of medical terminology, word origin, structure, and application with an emphasis on building a professional vocabulary required for employment within the allied health care field.
Course Type: Technical

HPRS 41001 Introduction to Health Profess 1.6-4.8 Credits
HPRS 41002 Wellness and Health Promotion 1.6-4.8 Credits
HPRS 41003 Death and Dying 3.2-4.8 Credits
HPRS 41004 Basic Health Profession Skills 4.8-9.6 Credits
HPRS 41005 Medical Law/Ethics for Health 1.6-6.4 Credits
HPRS 41006 Medical Terminology 1.6-4.8 Credits
HPRS 41007 Health and Wellness 0.7-4.8 Credits
HPRS 41009 Interpretation of Laboratory R 1.6-4.8 Credits
HPRS 41091 Special Topics in Health Profe 0.7-11.2 Credits
HPRS 42000 Pharmacology for Health Profes 3.2-6.4 Credits
HPRS 42001 Pathophysiology 3.2-6.4 Credits
HPRS 42030 Research Applications 1.6-4.8 Credits
HPRS 42031 General Health Professions Man 3.2-6.4 Credits
HPRS 42032 Health Care Communications 3.2-12.8 Credits
HPRS 42033 Consumer Oriented Health Deliv 3.2-6.4 Credits
HPRS 55000 Essentials of Medical Terminology 1.6 Credits
Prerequisite(s): None Note: Textbook required A basic course in the study of medical terminology, word origin, structure and application.

HPRS 55001 Pathophysiology 4.8 Credits
Prerequisite(s): None. This is a study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and physical and physiological reactions to diseases and injuries. (HPRS 2301). Note: Textbook Required.

HPRS 55002 Leadership in Healthcare - Foundations 3.2 Credits
Note: Textbook Required. This course provides the foundational knowledge required for every leader in a variety of healthcare settings. Leaders occasionally are born with the knowledge to lead; most learn to be great leaders. Training the next generation of high quality and successful leaders needed in today's complex world of healthcare will be the result of deliberate planning by healthcare organizations. This course provides the fundamental leadership skills required to provide a solid base for the quality leaders of the future. Some of the topics included in this course are Basic Leadership Theory, Competencies in Healthcare Leadership, Emotional Intelligence, Conflict Management, How to Run an Effective Meeting, Change Management, Basics of Human Resources, and Leading Multiple Generations. Additional levels of Leadership training are available. Who should attend this training? Anyone who guides, supervises, manages, or directs healthcare employees or volunteers.
HPRS 55003 Leadership in Healthcare - Mid-Managers 3.2 Credits
Note: Textbook Required. Expansion of the knowledge gained in the Leadership for Healthcare - Foundations will continue in this course. Designed for mid-level managers, participants will discuss Leadership Styles, work through Leadership Scenarios, utilize Competency Assessment Tools, discuss the Cycles of Leadership Development, analyze Leadership Models, utilize Outcome Measurements, improve Leadership Skills, and learn strategies for Leading Nonperforming employees. Additional levels of Leadership training are available. Who should attend this training: Middle management leaders who are subordinate to senior management but above entry-level leader positions. Some operational supervisors may be considered middle management, depending upon the organization of the particular healthcare group or corporation. Leaders who have successfully completed the Leadership for Healthcare - Fundamentals course are highly encouraged to continue building leadership skills.

HPRS 55004 Leadership in Healthcare - Executive 3.2 Credits
Note: Textbook Required. This training level is designed for top-level managers. Building on the knowledge gained in the Leadership for Healthcare - Foundations & Mid-Manager courses, participants will focus on Individual Leadership Styles, Cultural Differences in Leadership, Revenue Management, Disruptive Employee or Physician Behavior, Case Studies including practical application of Leadership Theory in Complex Healthcare Organizations, and Coaching and Mentoring the Next Leaders in your organization. Who should attend this training: Top level leaders, such as Directors and Executives, who are responsible for the direction or administration of a project, activity, department, clinic, or business, and/or may also be responsible for ensuing plans, orders, regulations, etc. that are carried out into practical effect. Leaders who have successfully completed the Leadership for Healthcare - Mid-Manager course, are highly encouraged to continue building leadership skills.

HPRS 55005 Home Health Aide 8 Credits
Prerequisite(s): Current negative TB, American Heart Association Health Care Provider CPR. Background check through PreCheck is required is an additional student expense. No GED/H.S diploma required. Parental waiver is required if under 18. Students must pass competency test in reading, writing and comprehension of English. Note: Textbook will be provided. Registration after the first class meeting is not allowed. Physical requirements: Must be able to squat, bend and lift or assist with 100 pounds. Students with medical conditions, including pregnancy, must have a release from their physician, prior to class start date. Clinical scrubs are required. Home healthcare can be a career, a passion or a need to care for your own family member. Become a Home Health Aide and learn to provide client care in areas of safety, accident prevention, basic client monitoring, and health documentation methods. You will also learn to provide care as an individual and how to function as a member of the health care team. A home healthcare aide is an entry level position in the workforce. After class completion, you will meet the DADS requirements for Home Health Aides. This course includes 16 hours of clinical practice in a lab and clinical setting.

HPRS 55006 Pharmacology for Health Prof 3.2 Credits
Prerequisite(s): Department Approval is required. Note: Textbook required. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages.

HPRS 55007 CPD HESI A2 Test Prep 0.8 Credits
This course provides a comprehensive HESI A2 preparation to help students improve their HESI A2 scores. Students will learn materials covered on the HESI A2 including math, reading comprehension, vocabulary, grammar, and anatomy and physiology. Students will also create a study plan for use outside of the class.

HPRS 55008 CPD Healthcare Bridge 2 Credits
This course provides students with a basic understanding of the human body, medical terminology, and practical math application as related to a healthcare setting.
HISTORY (HIST)

HIST 1301 United States History I 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil, and human rights, technological change, economic change, immigration and migration, and creation of the federal government.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HIST 1302 United States History II 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HIST 2301 Texas History 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HIST 2311 Western Civilization I 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include the cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HIST 2312 Western Civilization II 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HIST 2321 World Civilization I 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, religious and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development, interaction and impact of global exchange.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

HIST 2322 World Civilization II 3 Credits (3 Lec, 0 Lab)
This is a survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 15th century to the present. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include maritime exploration and transoceanic empires, national/state formation and industrialization, imperialism, global conflicts and resolutions and the global economic integration. The course emphasizes the development, interaction and impact of global exchange.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

HIST 2327 Mexican American History I 3 Credits (3 Lec, 0 Lab)
This is a survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicano/a. Periods include early indigenous societies, conflict and conquest, early European colonization and empires, New Spain, early revolutionary period, Mexican independence and nation building, United States expansion to the United States-Mexico War Era. Themes to be addressed are mestizaje and racial formation in the early empire, rise and fall of native and African slavery, relationship to early global economies, development of New Spain’s/ Mexico’s northern frontier, gender and power, missions, resistance and rebellion, emergence of Mexican identities, California mission secularization, Texas independence, United States’ wars with Mexico, and the making of borders and borderlands. (May be applied to U.S. History requirement.)
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic
HIST 2328  Mexican American History II  3 Credits  (3 Lec, 0 Lab)
A survey of the economic, social, political, intellectual, and cultural history of Mexican Americans/Chicano/a. Periods include the United States-Mexico War Era, incorporation of Northern Mexico into the United States, Porfriean Mexico, and the nineteenth century American West, 1910 Mexican Revolution and Progressive Era, the Great Depression and New Deal, World War II and the Cold War, Civil Rights Era, Conservative Ascendancy, the age of NAFTA and turn of the 21st Century developments. Themes to be addressed are the making of borders and borderlands, impact of Treaty of Guadalupe Hidalgo, gender and power, migration and national identities, citizenship and expulsion, nineteenth century activism and displacement, industrialization and the making of a transnational Mexican working class, urbanization and community formation, emergence of a Mexican American Generation, war and citizenship, organized advocacy and activism, Chicano Movement, changing identifications and identities, trade and terrorism. (May be applied to U.S. History requirement.)
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

HIST 2381  African-American History  3 Credits  (3 Lec, 0 Lab)
This course is a study of historical, economic, social, and cultural development of minority groups. May include African-American, Mexican American, Asian American, and Native American issues.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

HIST 2389  Academic Cooperative  3 Credits  (1 Lec, 8 Lab)
This is an instructional program designed to integrate on-campus study with practical hands-on experience in history. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior and/or social institutions.
Prerequisite(s): Six hours of history; Reading level 7, Writing level 7

Course Type: Academic

HIST 59001  King Henry VIII/Queens (net)  0 Credits
HOMELAND SECURITY (HMSY)

HMSY 1337 Introduction to Homeland Security 3 Credits (3 Lec, 0 Lab)
This course is an overview of homeland security including an evaluation of the profession of homeland security issues throughout Texas and the United States. The course includes an examination of the roles undertaken and methods used by governmental agencies and individuals to respond to those issues.
Prerequisite(s): Reading level 4

Course Type: Technical

HMSY 55000 Introduction to Homeland Security 4.8 Credits
An overview of homeland security. Evaluation of the progression of homeland security issues throughout Texas and the United States. An examination of the roles undertaken and methods used by governmental agencies and individuals to respond to those issues.
HOSPITALITY ADM/MGT (HAMG)

HAMG 1319  Computers in Hospitality  3 Credits  (3 Lec, 1 Lab)
This is an introduction to the use of computers and their relationship as an information system to the hospitality industry. This course includes an overview of industry-specific software.
Course Type: Technical

HAMG 1340  Hospitality Legal Issues  3 Credits  (3 Lec, 0 Lab)
This is a course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws.
Course Type: Technical

HAMG 41005  Principles of Tourism Management  3.2-9.2 Credits
HAMG 41007  Introduction to the Hospitality Industry  1.6-4.8 Credits
HAMG 41011  Sanitation and Safety  3.2-9.6 Credits
HAMG 41013  Front Office Procedures  3.2-9.6 Credits
HAMG 41015  Marketing of Hospitality Services  1.6-4.8 Credits
HAMG 41017  Recreational Services  4.8-4.8 Credits
HAMG 41019  Computers in Hospitality  4.8-9.6 Credits
HAMG 41021  Introduction to Hospitality Industry  3.2-9.6 Credits
HAMG 41024  Hospitality Human Resources Management  3.2-9.6 Credits
HAMG 41040  Hospitality Legal Issues  3.2-9.2 Credits
HAMG 41042  Guest Room Maintenance  3.2-9.6 Credits
HAMG 41091  Special Topics in Hospitality  0.7-11.2 Credits
HAMG 42001  Principles of Food and Beverage Management  3.2-9.6 Credits
HAMG 42005  Hospitality Management and Lea  3.2-9.6 Credits
HAMG 42007  Hospitality Marketing and Sales  3.2-9.6 Credits
HAMG 42030  Convention and Group Management  3.2-9.6 Credits
HAMG 42032  Hospitality Financial Management  3.2-9.6 Credits
HAMG 42037  Hospitality Facilities Management  3.2-9.6 Credits
HUMA 1301  Introduction to the Humanities I  3 Credits  (3 Lec, 0 Lab)
This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

HUMA 1305  Introduction to Mexican-American Studies  3 Credits  (3 Lec, 0 Lab)
This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican-American, Chicano and Chicana communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican-American experience.
Prerequisite(s): Reading level 6 and Writing level 6
Course Type: Academic

HUMA 1311  Mexican-American Art Appreciation  3 Credits  (3 Lec, 0 Lab)
This course is an examination of Mexican-American/ Chicano artistic expressions in the visual and performing arts.
Prerequisite(s): Reading level 6
Course Type: Academic
IMED (IMED)

IMED ADD Interactive Media I 6.4 Credits
IMED 1040 Web Page Creation II 0.7-4 Credits
IMED 1301 Introduction to Digital Media 3 Credits (2 Lec, 4 Lab)
This course offers a survey of the theories, elements, and hardware/software components of digital media. Emphasis is on conceptualizing and producing digital media presentations.
Course Type: Technical

IMED 1316 Web Page Design I 3 Credits (2 Lec, 4 Lab)
This course offers instruction in web design and related graphic design issues including mark-up languages, web sites, and browsers.
Prerequisite(s): ARTC 1325 or approval of department chair
Course Type: Technical

IMED 1341 Interface Design with Photoshop 3 Credits (2 Lec, 2 Lab)
This course offers skill development in the interface design process including selecting interfaces that are relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography.
Course Type: Technical

IMED 1345 Interactive Digital Media I 3 Credits (2 Lec, 2 Lab)
This course covers the use of graphics and sound to create interactive digital media applications and/or animations using industry standard authoring software.
Course Type: Technical

IMED 2311 Web Portfolio Development 3 Credits (2 Lec, 2 Lab)
This course includes preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques.
Prerequisite(s): ITSC 1319, ITSE 1359, and ITSE 2313
Course Type: Technical

IMED 2315 Web Page Design II 3 Credits (2 Lec, 4 Lab)
This course is a study of mark-up language advanced layout techniques for creating web pages. The emphasis is on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues.
Prerequisite(s): IMED 1316 or approval of department chair
Course Type: Technical

IMED 35004 Web Page Design I 9.6 Credits
IMED 41000 Blackboard Site Creat. & Maint 0.7-4 Credits
IMED 41001 Introduction to Multimedia 4.8-9.6 Credits
IMED 41002 Web Page Creation I 0.7-4 Credits
IMED 41005 Multimedia Authoring I 4.8-9.6 Credits
IMED 41011 Storyboard 1.6-4.8 Credits
IMED 41016 Web Page Design I 1.6-6.4 Credits
IMED 41040 Web Page Creation II 0.7-4 Credits
IMED 41041 2-D Interface Design 4.8-9.6 Credits
IMED 41043 Digital Sound 4.8-9.6 Credits
IMED 41045 Interactive Multimedia I 4.8-9.6 Credits
IMED 41051 Digital Video 4.8-9.6 Credits
IMED 41091 Special Topics in Educational/ 0.7-11.2 Credits
IMED 42001 Instructional Design 4.8-9.6 Credits
IMED 42005 Multimedia Authoring II 4.8-9.6 Credits
IMED 42009 Internet Commerce 4.8-9.6 Credits
IMED 42011 Portfolio Development 4.8-9.6 Credits
IMED 42013 Project Analysis and Design 4.8-9.6 Credits
IMED 42015 Web Page Design II 1.6-6.4 Credits
IMED 42041 Advanced Digital Video 4.8-9.6 Credits
IMED 42045 Interactive Multimedia II 4.8-9.6 Credits
IMED 42049 Internet Communications 6.4-9.6 Credits
IMED 42051 Multimedia Programming 4.8-9.6 Credits
IMED 55000 Interface Design with Photoshop 6.4 Credits
Prerequisite(s): None Note: None This course offers skills development in the interface design process, including selecting interfaces that are meaningful to users and relative to a project's content and delivery system. The emphasis is on aesthetic issues such as iconography, screen composition, colors, and typography. This course utilizes the Photoshop software package. (IMED 1341)

IMED 55001 MS 2124: Programming with C# 4 Credits
The goal of this course is to provide students with the knowledge and skills they need to develop C# applications for the Microsoft.NET Platform. The course focuses on C# program structure, language syntax, and implementation details.

IMED 55002 MS 2389: Programming with ADO.NET 2.4 Credits
This course will teach developers to build data-centric applications and Web services with Microsoft ADO.NET, Microsoft SQL Server 2000 and the Microsoft.NET Framework,

IMED 55003 Dreamweaver-Basic Skills 1.6 Credits
Learn to advertise your skills, product, or company on the World Wide Web. Design and create attractive and professional web pages using Adobe's Dreamweaver software.

IMED 55004 FrontPage - Basic Skills 2.4 Credits
Learn to advertise your skills, product, or company on the World Wide Web. Design and create attractive and professional web pages using Microsoft's FrontPage software.

IMED 55006 FrontPage-Beginner 0.8 Credits
Use MS FrontPage for web page creation.
IMED 55007  Flash-Basic Skills  1.6 Credits
Explore the fundamentals of Macromedia Flash. Learn to create images and Flash movies for delivery on the Web.

IMED 55008  Flash-Advanced Skills  1.6 Credits
Build upon your basic Macromedia Flash skills. This course is a continuation of Flash-Basic Skills. Develop proficiency in animation techniques, Action Script, behaviors, and audio and video techniques.

IMED 55009  GoLive-Basic Skills  0.8 Credits
Learn the basic techniques for creating and modifying Web sites with Adobe GoLive. Students will learn to format text, apply styles, create tables, apply images and links, manage Web site files, and publish a Web site.

IMED 55010  Adobe GoLive  3.2 Credits
Students will learn the basics of web design using Adobe GoLive. Students will add text and graphics to their web pages and create page layouts using tables and frames. Students will add interactivity using links, smart objects, and actions. Students will add formatting using cascading style sheets. Students will design forms and manage their websites using GoLive. A copy of GoLive is required.

IMED 55011  Dreamweaver Introduction  3.2 Credits
At the end of this class students will be able to create and manage web sites using Macromedia Dreamweaver. Students will insert pictures, Flash text and buttons into web pages. Students will use Cascading Style Sheets to format web pages. Students will use frames, layers and tables for designing layout for pages. Students will manage sites using Dreamweaver's site management tools. Students will need a copy of Dreamweaver.

IMED 55012  FrontPage-Intermediate  0.8 Credits
Design, layout, and publishing techniques for Web documents. Utilized techniques in tables, forms, and frames. Includes application of tools for creating and editing a Website.

IMED 55013  Dreamweaver - Advanced Skills  1.6 Credits
This course is a continuation of Dreamweaver- Basic Skills. Learn to create templates, forms, rollovers, and basic animations and database-driven pages.

IMED 55014  Fireworks-Basic Skills  0.8 Credits
Explore the fundamentals of Macromedia Fireworks. Learn to design and develop interactive images and animations for the Web.

IMED 55015  Flash MX Advanced  2.4 Credits
Students will create vector graphics using Flash's drawing tools. Students will create basic animations using motion and shape tweening. Students will create interactive Flash projects using ActionScript. Students will create a web-based application that reads from files and links to other pages. Students will create accessible content using Flash. Students will import sound and video into their Flash animations.

IMED 55016  BioTech Careers  0.8 Credits
IMED 55017  BioReactor  0.8 Credits
IMED 55018  Rocketry for Educators  0.8 Credits
IMED 55019  Space Geography  0.8 Credits
IMED 55020  A Boost to Space: Newton's Laws of Motion  0.8 Credits
IMED 55021  Human Physiology in Space  0.8 Credits
IMED 55022  Flash CS3 Pro  0.8 Credits
IMED 55023  ASP.Net  0.8 Credits
IMED 55024  Web Page Design I  9.6 Credits
This course offers instruction in Internet web page design and related graphic design issues, including mark-up languages, websites, Internet access software, and interactive topics. (IMED 1316)

IMED 55025  Dreamweaver I  2.4 Credits
Prerequisite(s): Website Design Note: Textbook required; flash drive required Design and create attractive Web pages using Adobe's Dreamweaver software. Create templates, forms, rollovers, basic animations, and database driven Web pages.

IMED 55026  Web Site Design  2.4 Credits
Prerequisite(s): Windows for the Desktop or equivalent knowledge and Internet fundamentals Note: Textbook required; flash drive required This course offers instruction in Internet web site design. You will learn to format text and apply styles to text and to other elements of a site you will build. You will use color background, images, and multimedia to enhance your site. All of these skills will be presented in a manner consistent with good design techniques. You will learn how to publish your site.

IMED 55027  SharePoint User's Training  3.2 Credits
Prerequisite(s): Knowledge of Microsoft Office Interfaces Note: Textbook required; flash drive required SharePoint is Microsoft's web-based collaboration tool that allows users to share resources and create shared content. In this course, you will set up a team site and customize its layout and features. You will capture and organize content into libraries and lists and manage the data. You will use blogs, wikis and workspaces to connect and collaborate. You will learn to integrate the Microsoft Office applications into the site and learn to use workflows in business processes.

IMED 55028  SharePoint Developer's Training  3.2 Credits
Prerequisite(s): Website Design Note: Textbook required Students who want to customize their SharePoint sites will benefit from this course. Students will create custom layouts, formatting, master pages, and custom applications.

IMED 55029  SharePoint Administrator's Training  3.2 Credits
Prerequisite(s): Network and server administration skills Note: Textbook required Students who will be administering SharePoint sites will benefit from this course. It covers command-line administration with Windows Powershell. It reviews service applications in depth and addresses backups and disaster recovery. Yet you will begin with some SharePoint 2010 theory, get introduced to the new interface and the architecture. You will walk through the installation and upgrade and all of the available options step by step. Finally you will learn the functions - Search, claims, taxonomy, Business Connectivity, Enterprise Content Management, and even social computing.
IMED 55032  SharePoint-Basics  1.6 Credits
Prerequisite(s): Windows for the desktop or equivalent. In this course you will use, create, and edit content in a team site. You will also create and perform basic management of a team site using SharePoint Foundation 2010. Upon successful completion of this course, you will be able to identify basic functions of collaboration technology and Microsoft SharePoint Foundation 2010 team sites; add and modify list items and work with list views; add, edit, and share documents across libraries and wikis; communicate and collaborate with team members; work remotely with SharePoint content; customize your SharePoint environment; create a team site and perform basic site administration functions.

IMED 55033  SharePoint Introduction  0.8 Credits
Prerequisite(s): Knowledge of Microsoft Office Interfaces. Note: Textbook required. SharePoint is Microsoft’s web-based collaboration tool that allows users to share resources and create shared content. In this course, you will set up a team site and customize its layout and features. You will capture and organize content into libraries and lists and manage the data. You will use blogs, wikis and workspaces to connect and collaborate. You will learn to integrate the Microsoft Office applications into the site and learn to use workflows in business processes.

IMED 55034  SharePoint Basic Administration  4 Credits
INSTRUMENTATION (INCR)

INCR 1302  Physics of Instrumentation  3 Credits  (2 Lec, 2 Lab)
This course is an introduction to simple control loops. Also, an introduction to pressure, temperature level, and flow transmitters and the various transducers used in the detection of changes in process variables.
Prerequisite(s): Reading level 6, Writing level 6, Math level 6
Course Type: Technical

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>INCR 55000</td>
<td>Brookfield Viscometer Calibration &amp; Maintenance</td>
<td>0.8</td>
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<tr>
<td></td>
<td>Training on how to install, remove, calibrate, troubleshoot and repair Brookfield Viscometers.</td>
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<tr>
<td>INCR 55001</td>
<td>Micro Motion Flowmeter Calibration and Maintenance</td>
<td>0.8</td>
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<tr>
<td>INCR 55002</td>
<td>Flowmeter Calibration &amp; Maintenance (Max)</td>
<td>1.6</td>
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<tr>
<td></td>
<td>Training on how to review calculations, chemistry and engineering behind Max Flowmeter. Detailed overview on Max Flowmeter components, demonstration of calibration and repair techniques and review of typical failure modes and troubleshooting procedures.</td>
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<tr>
<td>INCR 55003</td>
<td>Rosemount Transmitter Calibration</td>
<td>0.8</td>
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<td></td>
<td>This course is an instrumentation course covering the principles of measurement and calibration of a Rosemont Transmitter.</td>
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<tr>
<td>INCR 55004</td>
<td>O2 Analyzer Maintenance and Calibration</td>
<td>0.8</td>
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<td>This course covers general information, standards/regulations and the service requirements for oxygen analyzers. The student will learn the supply and delivery of oxygen, calibration using a DCS to read the amount of O2. Students will analyze the 4-20mA signal and perform the necessary calibrations.</td>
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</tbody>
</table>
INTC 1315 Final Control Elements 3 Credits (2 Lec, 2 Lab)
This course is a study of the various designs of final control elements including disassembly, assembly, calibration, troubleshooting, and required documentation. It includes instruction in basic techniques and calculations for proper valve sizing.
Prerequisite(s): INTC 2310 Reading level 6, Writing level 6, Math level 6.
Course Type: Technical

INTC 1322 Analog Controls I 3 Credits (2 Lec, 2 Lab)
This course is a study of basic concepts related industrial electrical controls and analog electrical controls in industrial processes. Includes components, terminology, symbols and diagrams used in analog control systems, electrical distribution, motor controls, relay logic, and ladder logic. Prerequisite or Co-requisite(s): INCR 1302, and
Course Type: Technical

INTC 1341 Principles of Automatic Control 3 Credits (2 Lec, 2 Lab)
This course is a study of the theory of basic measurements, automatic control systems and design, closed loop systems, controllers, feedback, control modes and control configurations. Topics include a study of process characteristics, control modes, control loop configurations, control loop analysis and controller tuning concepts. Computer based simulation will be used to reinforce the study learning objectives. Reading level 6, Math level 6, Writing level 6
Course Type: Technical

INTC 1348 Analytical Instrumentation 3 Credits (3 Lec, 0 Lab)
This course is a study of analytical instruments emphasizing their utilization in process applications including, but not limited to, chromatography, PH, conductivity, and spectrophotometer instruments. Topics include density, viscosity, conductivity, humidity/moisture, chromatography, spectroscopy, fugitive emissions and the flammable and explosive characteristics of solids, liquids and gases.
Prerequisite(s): Department Chair Approval and INTC 2336 Reading level 6, Math level 6, Writing level 6
Course Type: Technical

INTC 1350 Digital Measurement and Controls 3 Credits
This course offers a review of basic measurement control instrumentation. Includes movement of digital data through common systems employing parallel and serial transfers. (3:2-2).
Course Type: Technical

INTC 1353 Analog Controls II 3 Credits
This course is a study of analog controls in industrial processes. Includes electrical distribution, motor controls, relay logic, and ladder logic.
Prerequisite(s): INTC 1322, Reading level 6, Math level 6, Writing level 6 (3:2-2) This course will no longer be taught beginning Fall 2018.
Course Type: Technical

INTC 1355 Unit Operations 3 Credits (2 Lec, 2 Lab)
This course is an in-depth study of automatic control requirements of industrial process. Includes control systems, control loop tuning, and analysis.
Prerequisite(s): INTC 2310. Reading level 6, Math level 6, Writing level 6
Course Type: Technical

INTC 1375 Sample Systems 3 Credits (2 Lec, 2 Lab)
This course is designed to foster a comprehensive understanding of sample systems used in conjunction with process analytical instrumentation. Coverage will include sample system theoretical foundations, various sample system applications, design, testing and safety procedures, along with basic troubleshooting and maintenance techniques used when working with this hardware. Pre-requisite: Department Chair Approval. Reading level 6, Math level 6, Writing level 6.
Course Type: Technical

INTC 2310 Principles of Industrial Measurement II 3 Credits (2 Lec, 2 Lab)
This course is a study of additional principles of measurement. Includes devices used to measure process variables and basic control functions.
Prerequisite(s): INTC 1301 or INCR 1302. Reading level 6, Math level 6, Writing level 6.
Course Type: Technical

INTC 2330 Instrumentation Systems Troubleshooting 3 Credits (2 Lec, 2 Lab)
This course in an in-depth coverage of the techniques of troubleshooting instrumentation systems in a process environment. Includes troubleshooting upsets in processes.
Prerequisite(s): INTC 1315. Writing level 6, Math level 6, Reading level 6.
Course Type: Technical

INTC 2333 Instrumentation Systems Installation 3 Credits (2 Lec, 2 Lab)
This course covers synthesis, application, and integration of instrument installation components and includes a comprehensive final project.
Prerequisite(s): INTC 2310
Course Type: Technical

INTC 2336 Distributed Control and Programmable Logic 3 Credits (2 Lec, 2 Lab)
This course is an overview of distributed control systems including configuration of programmable logic controllers, smart transmitters, and field communicators. It includes functions of digital systems in a process control environment.
Prerequisite(s): Reading level 6, Math level 6, Writing level 6
Course Type: Technical
INTC 2339 Instrument and Control Review 3 Credits (3 Lec, 0 Lab)
This course is an overview of instrument and control technology, stressing preparation for industry employment testing for the National Institute of Engineering Technologist Certification (level 2) or the Instrumentation Systems and Automatic Certified Control Systems Technician (level I) Certificate (ISA CCST). This course prepares graduating students with the background necessary to take the ISA Technician Training certification in preparation for industry employment and national testing. NOTE: This course will no longer be taught beginning Fall 2018.
Prerequisite(s): Reading level 6, Math level 6, Writing level 6
Course Type: Technical

INTC 2345 Advanced Analyzers 3 Credits (2 Lec, 2 Lab)
This course covers advanced topics in composition analyzers and their sample systems. The course is designed to foster a comprehensive understanding of the more advanced analyzers, such as the gas chromatographs, ultraviolet and infrared analyzers. Coverage will include sample systems for the analyzers, the design and theory of operation of each analyzer type, safety procedures along with basic troubleshooting and maintenance techniques.
Prerequisite(s): Department Chair Approval and INTC 1348 and 1375; Reading level 7, Math level 6, Writing level 6.
Course Type: Technical

INTC 2359 Distributed Control Systems 3 Credits (2 Lec, 2 Lab)
This course is a study of philosophy and application of distributed control systems. Topics include hardware, firmware, software, configuration, communications and networking systems required to implement a distributed control strategy.
Prerequisite(s): INTC 1315, Reading level 6, Math level 6, Writing level 6
Course Type: Technical

INTC 2374 Physical Properties Analyzers 3 Credits (2 Lec, 2 Lab)
This course covers the theory of operation, calibration, sample analysis, maintenance and repair of pH, ORP, conductivity, oxygen and moisture analyzers and relevant safety concepts associated with each.
Prerequisite(s): Department Chair Approval and INTC 1348 and INTC 1375. Reading level 6, Math level 6, Writing level 6.
Course Type: Technical

INTC 2388 Internship Instrumentation Technology/Technician 3 Credits (0 Lec, 18 Lab)
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer.
Prerequisite(s): department chair approval. Reading level 6, Math level 6, Writing level 6.
Course Type: Technical

INTC 41091 S.T. in Inst. Tech/Technician 0.7-11.2 Credits

INTC 55000 Instrumentation: Measurement & Calibration 3.2 Credits
This course will cover process instrumentation and control as well as the basics of instrumentation failures. Review pressure, level, flow, and temperature fundamentals. Troubleshooting in the areas of Frameworks, tools, test, equipment, scenarios and hints will also be covered.

INTC 55001 Introduction to Fieldbus 0.8 Credits
Students will learn what constitutes a Foundation Fieldbus segment and how it operates. It will cover the fundamentals of Foundation Fieldbus and compare a Fieldbus transmitter to its analog counterpart.

INTC 55004 SM 100: Installation/Replacement of Meters 0.8 Credits
Technical requirements for proper installation or replacement of AMS electric meters, including the differences between AMS electric meters and conventional electric meters.

INTC 55005 Instrumentation Principles 2 Credits
Students will learn to identify basic process equipment; use terminology to describe instrumentation components of process equipment; describe basic functions of instrumentation; and relate scientific principles associated with equipment. Interpretation of P&ID symbols and drawings is also covered.

INTC 55009 Advanced Operations of Digital Devices (M) 3.6 Credits
This course focuses on the configuration fundamentals, the calibration process, the measurements of multiple variables, and the utilization of computer-based configuration tools for both digital transmitters and valve controllers.

INTC 55010 Advanced Operations of Digital Devices (N) 3.6 Credits
This course focuses on the configuration fundamentals, the calibration process, the measurements of multiple variables, and the utilization of computer-based configuration tools for both digital transmitters and valve controllers.

INTC 55011 Advanced Operations of Digital Devices (A) 3.6 Credits
This course focuses on the configuration fundamentals, the calibration process, the measurements of multiple variables, and the utilization of computer-based configuration tools for both digital transmitters and valve controllers.

INTC 55012 Data Communication Systems (M) 4 Credits
This course gives you the tools to design and maintain industrial communication systems on the plant floor.

INTC 55013 Data Communication Systems (N) 4 Credits
This course gives you the tools to design and maintain industrial communication systems on the plant floor.

INTC 55014 Data Communication Systems (A) 4 Credits
This course gives you the tools to design and maintain industrial communication systems on the plant floor.

INTC 55015 Networking and Security (M) 4 Credits
This course will teach you about the latest developments in networking, including practical tips on designing, implementing, and testing TCP/IP-based networks and how to apply them securely and reliably in an industrial environment.

INTC 55016 Networking and Security (N) 4 Credits
This course will teach you about the latest developments in networking, including practical tips on designing, implementing, and testing TCP/IP-based networks and how to apply them securely and reliably in an industrial environment.

INTC 55017 Networking and Security (A) 4 Credits
This course will teach you about the latest developments in networking, including practical tips on designing, implementing, and testing TCP/IP-based networks and how to apply them securely and reliably in an industrial environment.

INTC 55018 Math for Instrumentation Techs 3.2 Credits
This course is designed for the instrument technician who may be struggling with mathematical computations or those who need a basic refresher.
INTC 55019 Math for Instrumentation Techs (N) 3.2 Credits
This course is designed for the instrument technician who may be struggling with mathematical computations or those who need a basic refresher.

INTC 55020 Math for Instrumentation Techs (A) 3.2 Credits
This course is designed for the instrument technician who may be struggling with mathematical computations or those who need a basic refresher.

INTC 55021 Intro to Automation & Control (M) 3.6 Credits
This popular course combines lecture and hands-on labs to provide an overview of industrial measurement and control.

INTC 55022 Intro to Automation & Control (N) 3.6 Credits
This popular course combines lecture and hands-on labs to provide an overview of industrial measurement and control.

INTC 55023 Intro to Automation & Control (A) 1.6 Credits
This popular course combines lecture and hands-on labs to provide an overview of industrial measurement and control.

INTC 55024 Standard Instrumentation & Control Documentation (M) 1.6 Credits
This course will present the methodology for the design and development of control systems documentation.

INTC 55025 Standard Instrumentation & Control Documentation (N) 1.6 Credits
This course will present the methodology for the design and development of control systems documentation.

INTC 55026 Standard Instrumentation & Control Documentation (A) 1.6 Credits
This course will present the methodology for the design and development of control systems documentation.

INTC 55030 Maintaining Pneumatics (M) 1.6 Credits
This course covers correct technology, operation, and maintenance of pneumatic instruments employed in modern process facilities.

INTC 55031 Maintaining Pneumatics (N) 1.6 Credits
This course covers correct technology, operation, and maintenance of pneumatic instruments employed in modern process facilities.

INTC 55032 Maintaining Pneumatics (A) 1.6 Credits
This course covers correct technology, operation, and maintenance of pneumatic instruments employed in modern process facilities.

INTC 55033 Electronic Instruments (M) 3.6 Credits
This course covers a combo of practical information and hands-on experience covering proper installation, calibration, and maintenance of electronic instruments.

INTC 55034 Electronic Instruments (N) 3.6 Credits
The course covers a combo of practical information and hands-on experience covering proper installation, calibration, and maintenance of electronic instruments.

INTC 55035 Electronic Instruments (A) 3.6 Credits
This course covers a combo of practical information and hands-on experience covering proper installation, calibration, and maintenance of electronic instruments.

INTC 55036 Distributed Control Systems 12.8 Credits
Prerequisite(s): Permission from the credit Department Chair Philosophy and application of distributed control systems. Includes hardware, firmware, software, configuration, communications, and networking systems required to implement a distributed control strategy. (INTC 2359)

INTC 55037 Basic Dimensional Measurement Tools 1.6 Credits
Note: Materials are provided. In this course you will become proficient in using and reading basic measuring devices. You will master the essentials of handling, applying, and reading the most common gauges on the shop floors from steel rules to micrometers and height gauges.

INTC 55038 Measurement and Calibration- Intro 1.6 Credits
Prerequisite(s): None
Note: Materials provided This course is full introduction to the field of Metrology. Vocabulary, principles, domains, concepts, and processes are covered. Upon completion of the course, trainees will be able to perform calibration of medium to high level test and measurement equipment, coordinate and lead teams for field calibration and maintenance, verify calibration data sheets for technical content and accuracy based upon instrument specifications and approved calibration procedures, develop calibration procedures to meet the needs of the customer while supporting traceability of the measurements, and complete all documentation associated with position accurately and efficiently while maintaining a 5 % or less of the combined Quality Documentation Inspection (QDI) and Process Verification Inspection (PVI) discrepancy rates.

INTC 55040 NCCER Instrumentation Level 1 12 Credits
Prerequisite(s): None
This course prepares the trainee for certification in the NCCER instrumentation, including instruction in to the orientation of the trade, electrical systems, and terminology, drawings and documentation, flow, pressure level and temperature. Course includes NCCER CORE.

INTC 55041 NCCER Instrumentation Level 2 12 Credits
Prerequisite(s): NCCER Core and Instrumentation Level 1 This course prepares the trainee to achieve NCCER Instrumentation Level 2, by introducing the concept of process control and the major process variables: temperature, pressure, level and flow. Also included is a final review of drawings and documentation, then introductions to test equipment and how these systems are installed.

INTC 55042 PID Loops 2 Credits
This course will cover the setup, maintenance and tuning of a PID controller. The course will cover the fundamentals of a PID control system, PID variations, and how to evaluate the health and tuning of PID loops. To learn elements critical to tuning success, different process types will be introduced, the effect of noise will be studied and the pros and cons of open loop tests and closed loop tests will be discussed.

INTC 55043 Instrumentation Controls 2.4 Credits
This course is an introduction to simple control loops. Also, an introduction to pressure, temperature level, and flow transmitters and the various transducers used in the detection of changes in process variables. Included is a study of basic concepts related to industrial electrical controls and analog electrical controls in the industrial processes. This includes components, terminology, symbols and diagrams used in analog control systems, electrical distribution, motor controls, relay logic, and ladder logic.

INTC 55044 Instrumentation Troubleshooting 3.2 Credits
This course in an in-depth coverage of the techniques of troubleshooting instrumentation systems in a process environment. Includes troubleshooting upsets in processes.

INTC 55045 Basic Instrumentation 1.6 Credits
This course is designed to introduce process operators to the basic concepts of industrial instrumentation. This course will cover safety first, then the fundamental concepts of process variables such as temperature, pressure, level and flow, elements of control systems, describe typical feedback control loops, and read P&IDs.
INTC 55046  Alarm and Interlock Testing  1.6 Credits
This course is a study of philosophy and application of distributed control systems, safety and interlock systems. Topics include hardware, firmware, software, configuration, communications and networking systems required to implement a distributed control strategy. The course will cover a system where each analog input signal has HiHi, Hi, Lo, and LoLo interlocks. Protection, troubleshooting, diagnostic, repair, and theory application will be covered.
INTERIOR DESIGN (INDS)

INDS 1311  Fundamental of Interior Design  3 Credits  (2 Lec, 4 Lab)
This course is an introduction to the elements and principles of design, the interior design profession, and the interior design problem-solving process.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1315  Materials, Methods and Estimating  3 Credits  (2 Lec, 4 Lab)
This is a study of materials, methods of construction and installation, and estimating for interior design applications.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1319  Technical Drawing for Interior Designers  3 Credits  (2 Lec, 4 Lab)
This course is an introduction to reading and preparing technical construction drawings for interior design, including plans, elevations, details, schedules, dimensions, and lettering.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1345  Commercial Design I  3 Credits  (2 Lec, 4 Lab)
This course is a study of design principles applied to furniture lay-out and space planning for commercial interiors.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8; and DFTG 1409
Course Type: Technical

INDS 1349  Fundamentals of Space Planning  3 Credits  (2 Lec, 4 Lab)
This course covers the study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings and presentations.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1351  History of Interiors I  3 Credits  (2 Lec, 2 Lab)
This course is an historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1352  History of Interiors II  3 Credits  (2 Lec, 2 Lab)
This course is a multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 1449  Fundamental of Space Planning  4 Credits  (3 Lec, 3 Lab)
This course covers the study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings and presentations.
Course Type: Technical

INDS 1451  History of Interiors I  4 Credits  (4 Lec, 0 Lab)
This course is an historical survey of design in architecture, interiors, furnishings, and decorative elements from the ancient cultures through the Italian Renaissance time period and includes a historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings focusing on Egypt, Greece, Italy, Spain, and France.
Course Type: Technical

INDS 1452  History of Interiors II  4 Credits  (4 Lec, 0 Lab)
This course is a multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time.
Course Type: Technical

INDS 2237  Portfolio Presentation  2 Credits  (2 Lec, 0 Lab)
This is a course in the preparation and presentation of a comprehensive interior design portfolio, including resume preparation, employment interview skills, and goal setting.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 2307  Textiles for Interior Design  3 Credits  (2 Lec, 4 Lab)
This course covers the study of interior design textiles including characteristics, care, codes, and applications.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 2313  Residential Design I  3 Credits  (2 Lec, 4 Lab)
This course is the study of residential spaces, including the identification of client needs, programming, standards, space planning, drawings, and presentations.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8; and DFTG 1409
Course Type: Technical

INDS 2315  Lighting for Interior Designers  3 Credits  (3 Lec, 0 Lab)
This course is designed to teach the fundamentals of lighting design, including lamps, luminaires, lighting techniques, and applications for residential and commercial projects.
Course Type: Technical

INDS 2321  Presentation Drawing  3 Credits  (2 Lec, 4 Lab)
This course is an introduction to two- and three-dimensional presentations, including drawings with one- and two-point perspectives, plans, and elevations.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical
INDS 2325 Professional Practices for Interior Design 3 Credits (2 Lec, 4 Lab)
This course is a study of business practices and procedures for interior designers, including professional ethics, project management, marketing, and legal issues.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8; and IND 1315.
Course Type: Technical

INDS 2335 Residential Design II 3 Credits (2 Lec, 4 Lab)
This course is a comprehensive study of complex residential interior design problems, including advanced space planning, specifications, budgets, and presentation renderings. Perquisites: Reading level 6, Writing level 6, Math level 8; and DFTG 1409
Course Type: Technical

INDS 2386 Internship-Interior Design 3 Credits (0 Lec, 9 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer. It offers experiences external to the College for an advanced student in a specialized field, involving a written agreement between the educational institution and a business or industry. Monitored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the College and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. The course may be repeated if topics and learning outcomes vary.
Prerequisite(s): Reading level 6, Writing level 6, Math level 8
Course Type: Technical

INDS 2387 Internship-Interior Design 3 Credits (0 Lec, 9 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer. It offers experiences external to the College for an advanced student in a specialized field, involving a written agreement between the educational institution and a business or industry. Monitored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the College and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. The course may be repeated if topics and learning outcomes vary.
Course Type: Technical

INDS 2405 Interior Design Graphics 4 Credits (3 Lec, 3 Lab)
This course offers skill development in computer-generated graphics and technical drawings for interior design applications.
Course Type: Technical

INDS 2407 Textiles for Interior Design 4 Credits (3 Lec, 3 Lab)
This course covers the study of interior design textiles including characteristics, care, codes, and applications.
Course Type: Technical

INDS 19002 Color Solutions for Your Home 0 Credits
INDS 41001 Basic Elements of Design 6.4-9.6 Credits
INDS 41005 Beginning Interior Design 1.6-6.4 Credits
INDS 41011 Fundamentals of Interior Design 4.8-9.6 Credits
INDS 41015 Materials, Methods and Estimat 4.8-9.6 Credits
INDS 41019 Technical Drawing for Interior 6.4-11.2 Credits
INDS 41041 Color Theory and Application 4.8-9.6 Credits
INDS 41045 Commercial Design I 6.4-11.2 Credits
INDS 41049 Fundamentals of Space Planning 6.4-11.2 Credits
INDS 41051 History of Interiors I 4.8-9.6 Credits
INDS 41052 History of Interiors II 4.8-9.6 Credits
INDS 41091 Special Topics in Interior Des 0.7-11.2 Credits
INDS 42001 Interior Design Building Syste 4.8-9.6 Credits
INDS 42005 Interior Design Graphics 6.4-11.2 Credits
INDS 42007 Textiles For Interior Design 4.8-9.6 Credits
INDS 42011 Interior Environmental Factors 4.8-9.6 Credits
INDS 42013 Residential Design I 6.4-11.2 Credits
INDS 42015 Lighting for Interior Designer 4.8-9.6 Credits
INDS 42017 Rendering Techniques 6.4-11.2 Credits
INDS 42021 Presentation Drawing 6.4-11.2 Credits
INDS 42025 Professional Practices for Int 4.8-9.6 Credits
INDS 42031 Commercial Design II 6.4-11.2 Credits
INDS 42035 Residential Design II 6.4-11.2 Credits
INDS 42037 Portfolio Presentation 3.2-8 Credits
INDS 55001 Fundamentals of Interior Design 9.6 Credits
This is an introduction to the elements and principles of design, the interior design profession, and the interior design problemsolving process. (INDS 1411)
INDS 55003 Textiles for Interior Design 9.6 Credits
This is a study of interior design textiles, including characteristics, care, codes, and applications. (INDS 2407)
INDS 55004 History of Interiors I 6.4 Credits
This is a historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings focusing on Egypt, Greece, Italy, Spain, and France. (INDS 1451)
INTERNAT BUS/LOGISTICS (IBUS)

IBUS 1300 Global Logistics Management 3 Credits (3 Lec, 0 Lab)
This course covers the study of global logistics, management processes, procedures, and regulations used in transportation, physical distribution, warehousing, inventory control, material handling, packaging, plant and warehouse location, risk management, customer service, and networks for logistics, suppliers, and information. It includes decision making and case resolution techniques to solve problems and to develop logistical and information networks for supply chain management appropriate for global corporations.
Course Type: Technical

IBUS 1301 Principles of Exports 3 Credits (3 Lec, 0 Lab)
This course is a study of export management processes and procedures including governmental control and compliance licensing or product. The course discusses documentation, commercial invoices, and traffic procedures, emphasizing human and public relations, management of personnel, finances, and accounting.
Course Type: Technical

IBUS 1302 Principles of Imports 3 Credits (3 Lec, 0 Lab)
This course covers the study of practices and processes of import management operations which may include such factors as government controls and compliance. It emphasizes the preparation and understanding of import documents such as customs invoices, packing lists, and commercial invoices.
Course Type: Technical

IBUS 1341 Introduction to International Supply Chain Global Management 3 Credits (3 Lec, 0 Lab)
This course is a study of international purchasing or sourcing. Topics include the advantages and the barriers of purchasing internationally, global sourcing and procurement technology, and purchasing processes. It emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics.
Course Type: Technical

IBUS 1354 International Marketing Management 3 Credits (3 Lec, 0 Lab)
This course provides an analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international marketing plan. General principles of customer relationship management including skills, knowledge, attitudes, and behaviors will be examined.
Course Type: Technical

IBUS 2332 Global Business Simulation 3 Credits (3 Lec, 0 Lab)
This course provides a simulation of a global environment. Students will engage in business practice and theory. The simulation may include researching foreign business cultures and importing and exporting products. Emphasizes participation in all business decisions related to running a simulated company.
Course Type: Technical

IBUS 2335 International Business Law 3 Credits (3 Lec, 0 Lab)
This course provides study of law as it applies to international business transactions in the global political-legal environment including home country, host country, and international jurisdiction. Study of inter-relationships among laws of different countries and the legal effects on individuals and business organizations. Topics include agency agreements, international contracts and administrations, regulations of exports and imports, technology transfers, regional transactions, intellectual property, product liability, and legal organization.
Course Type: Technical

IBUS 2341 Intercultural Management 3 Credits (3 Lec, 0 Lab)
This course explores cross-cultural comparisons of management and communications processes. Emphasizes cultural, ethnic, geographic distinctions, and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment.
Prerequisite(s): Reading Level 4.
Course Type: Technical

IBUS 2367 Practicum - Field Experience 3 Credits (0 Lec, 21 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. The learning plan emphasizes understanding of business environments and cultures, monetary systems and trade flows, import and export procedures, economics of transportation and distribution channels, government structures and regulatory issues, logistics operations, and supply chain management. Collaborating with the employer, the College develops and documents an individualized plan for the student, relating workforce training and experiences to the student’s general and technical course of study.
Prerequisite(s): 9 credit hours from IBUS courses - IBUS 1300, IBUS 1301, IBUS 1302, IBUS 1305, IBUS 1354, or LMGT 1345. A program GPA of at least 2.0 is required, or Department approval.
Course Type: Technical

IBUS 42001 Intl. Bus. Communications 0.7-4.8 Credits
IBUS 55000 Introduction to International Business & Trade 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. A study of the techniques for entering the international marketplace. Emphasis placed on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. (IBUS 1305)

IBUS 55001 International Marketing Management 4.8 Credits
Prerequisite(s): None. Note: Textbook required. Analysis of international marketing strategies using market trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international export/import marketing plan. (IBUS 1354)

IBUS 55002 Global Supply Chain Management 4.8 Credits
International purchasing or sourcing. Includes the advantages and the barriers of purchasing internationally, global sourcing, procurement technology, and purchasing processes. Emphasizes issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics. (IBUS 1341)
IBUS 55003 Principles of Imports 4.8 Credits
Practices and processes of import management operations. Includes
government controls and compliance. Emphasizes the preparation and
understanding of import documents such as customs invoices, packing
lists, and commercial invoices. (IBUS 1302)

IBUS 55004 Principles of Exports 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will
be assessed at time of payment. Export management processes and
procedures. Includes governmental controls and compliance, licensing
of products, documentation, commercial invoices, and traffic procedures.
Emphasizes human and public relations, management of personnel,
finance, and accounting procedures. (IBUS 1301)

IBUS 55005 SAP Logistics & Supply Chain Management 6.4 Credits
Prerequisite(s): Essential SAP Skills Note: All lessons and materials are
online. You will have access to the materials after the class is over for
an extended period of time. This course teaches the most common end
user functions in SAP’s Materials Management (MM) module. It will focus
on the following topics: Purchasing (basic and intermediate), Warehouse
Management, Material Master Data, Quotations; Inventory Management
and Physical Inventory. You will become familiar with material info
records and vendor source lists. You will learn how to work with purchase
requisitions, create purchase orders and good receipts, process vendor
invoices and run basic purchasing reports. Learn to perform goods
movements; create material reservations and issue goods; perform
physical inventory counts and corrections. You will then learn to run basic
inventory and stock reports. You will learn to create/change material
master records, create material types; and run common material master
data reports. Finally, you will learn to create contracts, perform mass
contract maintenance and create scheduling agreements and delivery
schedules.

IBUS 55006 Import Customs Regulations 4.8 Credits
Prerequisite(s): None This course covers the study of global logistics,
management processes, procedures, and regulations used in
transportation, physical distribution, warehousing, inventory control,
material handling, packaging, plant and warehouse location, risk
management, customer service, and networks for logistics, suppliers, and
information. It includes decision making and case resolution techniques
to solve problems and to develop logistical and information networks
for supply chain management appropriate for global corporations. (IBUS 2345)

IBUS 55007 SAP MM 4.8 Credits
SAP Materials Management (MM) course introduces students to the
most common end user functions in SAP’s MM module. This course is
ideal for those who are looking for opportunities with SAP’s logistics
applications. The course will teach hands-on SAP transactions and real-
life SAP business processes. At the end of the training, the student will
be able to work with a complete procurement life-cycle process, they
will be able to manage master data, create requisitions for materials,
convert requests into Purchase Orders, receive goods into inventory, issue
goods and handle returns. Materials management is also responsible for
valuation of the products and inventory movement and tracking.

IBUS 55008 Global Business Simulations 4.8 Credits
This course provides a simulation of a global environment. Students
will engage in business practice and theory. The simulation may include
researching foreign business cultures and importing and exporting
products. Emphasizes participation in all business decisions related to
running a simulated company. (IBUS 2332)

IBUS 55009 Intercultural Management 4.8 Credits
Prerequisite(s): Reading Level 4 This course explores cross-cultural
comparisons of management and communications processes.
Emphasizes cultural, ethnic, geographic distinctions, and antecedents
that affect individual, group and organizational behavior. May include
sociocultural demographics, economics, technology, legal issues,
negotiations and processes of decision making in the international
cultural environment. (IBUS 2341)

IBUS 55010 International Business Law 4.8 Credits
This course provides study of law as it applies to international business
transactions in the global political-legal environment including home
country, host country, and international jurisdiction. Study of inter-
relationships among laws of different countries and the legal effects
on individuals and business organizations. Topics include agency
agreements, international contracts and administrations, regulations
of exports and imports, technology transfers, regional transactions,
intellectual property, product liability, and legal organization. (IBUS 2335)
**INTL BUS/LOG-MARITIME (LMGT)**

**LMGT 1319 Introduction to Business Logistics 3 Credits (3 Lec, 0 Lab)**
This course is a systems approach to managing activities associated with traffic transportation, inventory management and control, warehouse, packaging, order processing, and materials handling.
Course Type: Technical

**LMGT 1321 Introduction to Materials Handling 3 Credits (3 Lec, 0 Lab)**
This course introduces the concepts and principles of materials management to include inventory control and forecasting activities.
Course Type: Technical

**LMGT 1323 Domestic and International Transportation Management 3 Credits (3 Lec, 0 Lab)**
This course is an overview of the principles and practices of transportation and its role in the distribution process. Emphasis on the physical transportation systems involved in the United States as well as on global distribution systems. Topics include carrier responsibilities and services, freight classifications, rates, tariffs, and public policy and regulations. Also includes logistical geography and the development of skills to solve logistical transportation problems and issues.
Course Type: Technical

**LMGT 1325 Warehouse and Distribution Center Management 3 Credits (3 Lec, 0 Lab)**
This course emphasizes physical distribution and total supply chain management. It includes warehouse operations management, hardware and software operations, bar codes, organization effectiveness, just-in-time manufacturing, continuous replenishment, and third-party issues.
Course Type: Technical

**LMGT 1345 Economics of Transportation and Distribution 3 Credits (3 Lec, 0 Lab)**
This is a study of the basic economic principles and concepts applicable to transportation and distribution.
Course Type: Technical

**LMGT 2071 Internship: Log & Mat Mgmt 48-160 Credits**

**LMGT 2330 International Logistics Management 3 Credits (3 Lec, 0 Lab)**
This course covers the identification of the principles and practices involved in international distribution systems including the multinational corporation. Attention to global strategic planning, production, supply, manpower/labor, geography, business communications, cultural, political, and legal issues affecting global distribution and firm/host relationships.
Course Type: Technical

**LMGT 42071 Internship: Log & Materials Mg 1.25-160 Credits**

**LMGT 55000 Supply Chain Management Introduction 0.7 Credits**
All companies have one or more supply chains. A well run supply chain PROFITABILITY converts materials, labor, overhead and services into products and services that customers value. This module provides the attendee with a strong understanding of supply chain management. We will cover concepts such as Value Chain, ERP, CRM, SRM and Lean. We will put these concepts together providing a clear picture on how they interrelate. Attendees will come back with a better understanding of what their company does and what they can do to better compete in the market.

**LMGT 55003 Basics of Inventory Management 0.7 Credits**
For most companies, inventory is the second or third largest asset on the balance sheet accounting for as much as 35% of a company’s assets. The sale of inventory is reflected on the income statement as cost of goods sold. For many companies cost of goods sold is 60% to 80% of sales. Effective management of inventory positively impacts customer service, profitability and return on investment. This module is designed to give the attendee a much better understanding of inventory and how to get more value from your company’s investment.

**LMGT 55005 Supply Chain Management Supply Management Issues 2.1 Credits**
While cost is a big reason to involve purchasing in design, is not the only one. Many OEMs do so to make sure their company’s technology roadmaps are tracking with suppliers’ roadmaps and vice versa. Purchasers who are involved in design also need to make sure that new, robust technologies that will eventually become mainstream get designed into new products, rather than older technology parts, which may soon become obsolete.

**LMGT 55006 Supply Chain Management Operation Issues 2.8 Credits**
The ability to control variability in areas such as forecasts and customer demand will be key to effective responsiveness. MIT research of corporate supply chain practices reveals that variability at the end of the supply chain is magnified and distorted as it proceeds up the chain. Such distortions and miscommunications of supply and demand information can have a negative impact across the supply chain.

**LMGT 55007 Supply Chain Management Distribution Issues 2.8 Credits**
Next-day service used to be a premium service, but now it’s pretty much a minimal requirement of being in business. It’s going to be more prevalent than it has ever been because shipper expectations are increasing. Logistics providers advise the shipper on how to best move the freight given the list of expected constraints.

**LMGT 55008 Supply Chain Management Integration Issues 1.4 Credits**
This course examines the interesting changes and fundamental shifts to more collaborative processes and the value that comes from these efforts.

**LMGT 55009 Supply Chain Management Certificate Program 10.4 Credits**
Businesses are beginning to recognize the potential of going beyond the historical view of the supply chain as a cost center to its emerging role as a strategic enabler of increased sales and margins. There is a need to recognize the reality of relationships within supply chain management. It’s a risk and a revenue sharing relationship.

**LMGT 55010 Cargo Handling & Stowage (Operation Level) 4 Credits**
Note: It shall be the policy of this school that all students provide appropriate photo identification upon enrollment. USCG & STCW approved, this course will satisfy the candidate with reliable knowledge of technical principles of sea transport of cargo and skills in the assessment of cargo securing arrangements. Also covered are the duties undertaken by the deck watch while loading and discharging cargo in port, and the care of cargo in transit. Subjects include: inspection and preparation of holds, cargo segregation, securing cargo, cargo handling equipment and safety, confined space entry and an overview of ship types (tankers, bulk carrier, container etc).

**LMGT 55011 Intro Business Logistics 4.8 Credits**
This course is a systems approach to managing activities associated with traffic transportation, inventory management and control, warehouse, packaging, order processing, and materials handling. (LMGT 1319)
LMGT 55012  SAP SCM  4.8 Credits
Prerequisite(s): Basic Computer Skills, SAP MM SCM, Supply Chain Management, helps manage flow of material, information and capital planning. SCM is divided into 2 key areas, Planning and Execution, APO - Advanced Planning and Optimization - is the heart of SCM and it takes care of planning optimizing different business processes namely DP - Demand Planning, SNP - Supply Network Planning, PPDS - Production Planning and Detailed Scheduling, and GATP - Global Available to Promise. Execution deals with procurement of raw materials and or products, manufacturing and finally order fulfillment - delivery to customers. This training will help identify demand requirement, planning, procurement of product, and delivery.

LMGT 55013  SAP Training - Customized  0.7 Credits
Customized SAP training will provide the employee with the skills necessary to create production orders, perform scheduling and capacity requirement planning. The employee will be trained to verify material before execution. Employees will also be trained on how to withdraw material, manage scrap material, and perform Goods movement and order settlement.

LMGT 55014  Economics of Trans and Dist  4.8 Credits
This is a study of the basic economic principles and concepts applicable to transportation and distribution (LMGT 1345)

LMGT 55015  Introduction to Materials Handling  4.8 Credits
This course introduces the concepts and principles of materials management to include inventory control and forecasting activities. (LMGT 1321)

LMGT 55016  Warehouse and Distribution Center Management  4.8 Credits
This course emphasizes physical distribution and total supply chain management. It includes warehouse operations management, hardware and software operations, bar codes, organization effectiveness, just-in-time manufacturing, continuous replenishment, and third-party issues. (LMGT 1325)

LMGT 55017  SAP S/4HANA  4.8 Credits
Prerequisite(s): SAP MM basic functionality in ECC. S/4HANA for procurement course will cover end to end business process of Procurement in SAP S/4HANA. It will cover introduction of S/4HANA, Architecture of S/4HANA logistics, Master data in S/4HANA Customization in Materials Management. Simplification list with respect to S/4HANA will highlight the major difference between ECC-MM and S/4HANA Procurement process. Apart from this students will learn SAP User Experience (SAP UX) with Fiori and Execute Procurement process in Fiori Launchpad. Students will be prepared to use S/4 HANA for procurement, identify the key differences between ECC-MM and S/4 Procurement, understand the complexities of migration from ECC to S/4HANA and use the new SAP User Experience through Fiori apps.
**INVASIVE CARDIOVASCULAR (CVTT)**

**CVTT 1110 Cardiac Catheterization I 1 Credit (1 Lec, 0 Lab)**
This course includes basic life support, cardiac pharmacology, and emergency procedures as they relate to the cath lab experience. Prerequisite(s): acceptance into the Invasive Cardiovascular Technology program.
Course Type: Technical

**CVTT 1153 Catheterization Lab Fundamentals II 1 Credit (1 Lec, 0 Lab)**
This course is a continuation of Catheterization Lab Fundamentals I with emphasis on X-ray technology and interventional procedures in the cardiac cath lab. Prerequisite(s): CVTT 1472, CVTT 1304, CVTT 1307, CVTT 1313, CVTT 1110
Course Type: Technical

**CVTT 1201 Introduction to Cardiovascular Technology 2 Credits (2 Lec, 0 Lab)**
This course is an introduction to the field of invasive cardiovascular technology and the role of the cardiovascular technologist. Topics include medical terminology, ethical/legal aspects, and communication skills. Prerequisite or Co-Requisites ENGL 1301
Course Type: Technical

**CVTT 1260 Clinical I - Cardiovascular Technology/Technologist 2 Credits (0 Lec, 12 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite(s): CVTT 1472, CVTT 1304, CVTT 1307, CVTT 1313, CVTT 1110
Course Type: Technical

**CVTT 1304 Cardiovascular Anatomy and Physiology 3 Credits (3 Lec, 0 Lab)**
This course is a study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focuses on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program
Course Type: Technical

**CVTT 1307 Cardiovascular Instrumentation 3 Credits (3 Lec, 1 Lab)**
This course includes basic principles, theory, and operation of cardiovascular equipment, electronics, and instrumentation. Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program
Course Type: Technical

**CVTT 1313 Catheterization Lab Fundamentals I 3 Credits (3 Lec, 1 Lab)**
This course is an introduction to the diagnostic procedures used in the cath lab. Prior didactic instruction in cardiac physiology and medical instrumentation applied to cath lab procedures including patient preparation and monitoring, angiographic equipment set-up, and the coronary angiography procedure itself. Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program
Course Type: Technical

**CVTT 1340 Cardiovascular Pathophysiology 3 Credits (3 Lec, 0 Lab)**
This course is a continuation of CVTT 1004/1304: Cardiovascular Anatomy and Physiology. Methods of hemodynamic data collection and implications in relation to cardiac diseases. Prerequisite(s): CVTT 1260, CVTT 1350, and CVTT 1153
Course Type: Technical

**CVTT 1350 Cardiac Catheterization II 3 Credits (3 Lec, 0 Lab)**
This course is a continuation of Cardiac Catheterization I. An intensive study of advanced cardiovascular diagnostic and therapeutic procedures including percutaneous transluminal coronary angioplasty and electrophysiology studies. Prerequisite(s): CVTT 1472, CVTT 1304, CVTT 1307, CVTT 1313, CVTT 1110
Course Type: Technical

**CVTT 1373 Essential Principles of Cardiovascular Technology 3 Credits (3 Lec, 0 Lab)**
This course is an overview of the field of invasive cardiovascular technology and the role of the cardiovascular technologist. Topics include medical terminology, cardiac pharmacology, cardiac patient assessment and cath lab emergency procedures. Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program
Course Type: Technical

**CVTT 1471 Principles of Radiologic Science 4 Credits (4 Lec, 1 Lab)**
This course includes effects of radiation exposure on biological systems. It includes typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure. Prerequisite(s): CVTT 1472, CVTT 1304, CVTT 1307, CVTT 1313, CVTT 1110
Course Type: Technical

**CVTT 1472 Patient Care in Invasive Cardiovascular Technology 4 Credits (4 Lec, 1 Lab)**
This course is an introductory cardiovascular patient care course with emphasis on patient transfer, sterile procedure, isolation precautions, patient safety measures, patient monitoring, and cardiovascular pharmacology. Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program
Course Type: Technical
**CVTT 2260 Clinical I - Cardiovascular Technology/Technologist 2 Credits (0 Lec, 12 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Acceptance into the Invasive Cardiovascular Technology program

Course Type: Technical

**CVTT 2330 Advanced Cardiovascular Instrumentation 3 Credits (3 Lec, 1 Lab)**
This course is a continuation of CVTT 1307: Cardiovascular Instrumentation. Theory, calibration, operation, and clinical application of cardiovascular diagnostic instrumentation and methods of hemodynamic data collection, calculation, analysis, and implications.
Prerequisite(s): CVTT 1350 and CVTT 1153

Course Type: Technical

**CVTT 2350 Cardiovascular Professional Transition 3 Credits (3 Lec, 0 Lab)**
This course is an exploration of professional opportunities outside the cardiovascular lab. Includes non-invasive cardiology, cardiac surgical procedures, hospital administration, and professional transition.
Prerequisite(s): CVTT 1340

Course Type: Technical

**CVTT 2361 Clinical II Cardiovascular Technology/Technologist 3 Credits (0 Lec, 18 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): CVTT 1260, CVTT 1350, and CVTT 1153

Course Type: Technical

**CVTT 2461 Clinical II - Cardiovascular Technology/Technologist 4 Credits (0 Lec, 24 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): CVTT 1360, CVTT 1350, CVTT 1153, CVTT 1471

Course Type: Technical

**CVTT 2462 Clinical III - Cardiovascular Technology/Technologist 4 Credits (0 Lec, 24 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): CVTT 1340

Course Type: Technical
LONG TERM CARE (LTCA)

LTCA 1312  Resident Care in the Long-Term Care Facility  3 Credits  (3 Lec, 0 Lab)
This course includes a study of the delivery of services to residents of long-term care facilities including ethical considerations and quality of life issues.
Course Type: Technical

LTCA 1313  Organization and Management of Long Term Care Facilities  3 Credits  (3 Lec, 0 Lab)
This course is an overview of the functional organizational structures common to long term care facilities. Includes an examination of the role of the administrator in the organization and management of long term care facilities.
Course Type: Technical

LTCA 2310  Environment of Long-Term Care Facility  3 Credits  (3 Lec, 0 Lab)
This course is an examination of the long-term care facility as a home-like environment with particular attention to building, grounds, and equipment. Also addresses rules, regulations, policies, and procedures affecting environmental safety.
Course Type: Technical

LTCA 2314  Long Term Care Law  3 Credits  (3 Lec, 0 Lab)
This course is a study of federal, state, and local statutes and regulations affecting the long term care industry.
Course Type: Technical

LTCA 2315  Financial Management of Long Term Care Facilities  3 Credits  (3 Lec, 0 Lab)
This course is a study of the techniques used in the financial management of the long term care facility including special accounting requirements of Medicare, Medicaid, and other third-party payor sources. Also covers strategies to promote financial sustainability.
Course Type: Technical

LTCA 2388  Internship-Health Care Facilities Administration/Management  3 Credits  (0 Lec, 18 Lab)
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

LTCA 2488  Internship-Health Care Facilities Administration/Management  4 Credits  (0 Lec, 22 Lab)
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

LTCA 2489  Internship-Health Care Facilities Administration/Management  4 Credits  (0 Lec, 23 Lab)
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical
MAMMOGRAPHY (MAMT)

**MAMT 2333 Essentials of Mammography 3 Credits (3 Lec, 0 Lab)**
This course includes concepts, theories, and equipment employed in breast imaging. Emphasis will be placed on breast anatomy, physiology, routine and additional projections and positions, patient education, and assessment. Content will include mammographic techniques for breast compression, magnification, specimen radiography, and selection of technical factors. Course will integrate interventional procedures, special exams, and special modalities. Quality Control and Quality Assurance procedures as described in the Mammography Quality Control Manual will be addressed. This course includes digital mammography.

Course Type: Technical

**MAMT 2363 Clinical - Mammography Technology 3 Credits (0 Lec, 10 Lab)**
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Prerequisite(s): Graduate of a 2-year accredited medical radiography program in Radiology, ARRT certification in Radiography.

Course Type: Technical

**MAMT 41091 Special Topics in Mammography 0.7-11.2 Credits**

**MAMT 42030 Quality Assurance 3.2-6.4 Credits**

**MAMT 42031 Instrumentation/Modalities 3.2-6.4 Credits**

**MAMT 42033 Anatomy/Positioning & Patient 3.2-6.4 Credits**

**MAMT 42037 Mammography 3.2-9.6 Credits**

**MAMT 42060 Clinical - Mammography Technol 4.8-57.6 Credits**

**MAMT 42061 Clinical - Mammography Technol 4.8-57.6 Credits**

**MAMT 42062 Clinical - Mammography Technol 4.8-57.6 Credits**

**MAMT 42063 Clinical - Mammography Technol 4.8-57.6 Credits**

**MAMT 42064 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 42065 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 42066 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 42067 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 42068 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 42069 Practicum (or Field Experience 11.2-64 Credits**

**MAMT 55000 Mammography - Essentials 4.8 Credits**
Prerequisite(s): Department approval is required. Contact 281-476-1501 ext. 1714 for approval and additional information. This course will be a presentation of specialized instruction in breast imaging. Emphasis will be placed on breast anatomy, physiology, positioning, patient education and assessment. Anatomy instruction will include surface anatomy as well as deep anatomy. Further emphasis will be placed on routine and additional projections and positioning modifications.

At the end of the course the student should be able to explain breast anatomy and physiology, conduct patient education and assessment, and perform routine and additional projections used in mammography including positioning modifications. (MAMT 2333). Note: As an additional student expense, physical, background and drug checks, etc. are requirements. Must be ARRT registered or eligible to test. Textbook is required.

**MAMT 55001 Clinical - Mammography Technologist 16 Credits**
Prerequisite(s): Successful completion of Mammography Essentials. Course approval is required. Call 281-476-1501 ext. 1714. Note: As an additional student expense, physical, background and drug checks, etc. are requirements. Must be ARRT registered or eligible to test. No textbook is required. Students will be provided with a health-related work experience that will enable them to apply specialized occupational theory, skills and concepts. Direct supervision is provided by a clinical professional. By the end of course students should be able to apply theory, concepts and skills involving specialized materials, tools, equipment, procedures, regulations, laws and interactions within and among political, economic, environmental, social and legal systems associated with the occupation and the business/industry. Students should be able to demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry. (MAMT 2363)
MARITIME ADMINISTRATION (MARA)

MARA 2401 Introduction to Ships and Shipping 4 Credits (3 Lec, 2 Lab)
Introduction to the maritime industry and ships used in the transportation of goods and services. Shipboard nomenclature, types and missions of merchant ships, shipbuilding nomenclature and dimensions, shipbuilding materials and methods, modes of cargo handling and their impact on ship design.
Prerequisite(s): Reading level 7

Course Type: Academic
MARITIME TECHNOLOGY (NAUT)

NAUT 1171 Medical Care Provider 1 Credit (1 Lec, 1 Lab)
This course is designed for licensed deck officers who provide immediate first aid to ship's personnel and to assist the ship's medical person-in-charge. The course provides training for candidates who provide medical care to the sick and injured when they remain on board ship.
Course Type: Technical

NAUT 1174 Maritime Regulation and Management 1 Credit (1 Lec, 0 Lab)
This course covers an in-depth examination of the laws and regulations surrounding the maritime transportation industry, and how the industry responds. The Jones Act, EPA, SOLAS, MARPOL, STCW, Flag, Class and Port State Control and Subchapter M will be reviewed. Case studies of well-known industry incidents will be reviewed. Industry responses such as the AWO/ROP/ISM Code and SEMS will be discussed. Students will learn about vessel safety and environmental management systems as well as document control, internal auditing, corrective and preventive action, change management and risk analysis and control.
Course Type: Technical

NAUT 1272 Marine Cargo Operations I 2 Credits (2 Lec, 1 Lab)
This course is an examination of passenger, containerized, roll-on-roll off, break bulk and dry bulk cargo vessels including issues associated with the loading, carriage and discharge of passengers and cargos. Requirements of special refrigerated and dangerous cargoes, cargo loss prevention, heavy-lift operations will be discussed. Emergency procedures, passenger safety and crowd and crisis management will be explored.
Course Type: Technical

NAUT 1273 Engineering Familiarization 2 Credits (2 Lec, 1 Lab)
This course is intended for both deck and engineering ratings that have little or no experience in the engine room who served on board a vessel as part of the regular complement and covers the mandatory minimum training requirements for engineering. The training includes basic safety and pollution prevention precautions and procedures, layouts of different types of engine rooms, types of hazards and handling equipment, general operational sequence and engine terminology.
Course Type: Technical

NAUT 1274 Marine Cargo Operations II 2 Credits (2 Lec, 1 Lab)
This course is an in-depth study of the transport of bulk liquid cargoes by tankship. The course topics include: vessel design/construction, oil/chemical cargo characteristics, cargo system design, cargo pumps, loading/discharging operations, venting/vapor control systems, ballast/deballasting operations, tank cleaning, gas freeing/enclosed space entry, inert gas systems, crude oil washing operations, oil pollution regulations and control, and tanker safety. It includes basic safety and pollution prevention precautions and procedures, layouts of different types of oil tankers, types of cargo, their hazards and their handling equipment, general operational sequence and oil tanker terminology. The course takes full account of the annex to resolution 10 adopted by the International Conference on Training and Certification of Seafarers, 1978. Any applicant successfully completing this course will satisfy the training requirements of 46 CFR for an endorsement as Tankerman PIC Barge-Dangerous Liquids.
Course Type: Technical

NAUT 1276 Seamanship II 2 Credits (2 Lec, 1 Lab)
This course is an introduction to vessel characteristics, vessel operations and ship handling with a focus on inland, coastal, oil and towing vessels. Ship handling in inland waters, narrow channels as well as maneuvering in heavy seas, docking, undocking, mooring will be discussed. The makeup of tows and the use and maintenance of towing machinery and gear will be discussed.
Prerequisite(s): NAUT 1372
Course Type: Technical

NAUT 1372 Seamanship I 3 Credits (3 Lec, 1 Lab)
This course is a study of seamanship designed to introduce the student to the maritime workplace and prepare them for employment. The students are prepared for the role of Able-Bodied Seaman and assignment to lookout and watch keeping duties aboard inland, coastal and ocean going vessels. Vessel Security Officer responsibilities will also be addressed. This course is designed to teach new skills to the entry-level mariner with minimal sea-going experience and serves to increase awareness and promote safety in maritime surroundings.
Course Type: Technical

NAUT 1374 Basic Safety and Survival 3 Credits (2 Lec, 2 Lab)
This course combines the four modules of SCTW Basic Safety Training: Basic Firefighting, Personal Safety Social Responsibility, Personal Survival and First Aid CPR, with a module on Proficiency in Survival Craft to provide a comprehensive introduction to safety and survival at sea. The course provides required practical lifeboat and lifesaving training for certification as Life boatman by the U.S. Coast Guard. Hands on training will include time on a fire training field, work in pools with life rafts and survival gear and launching and rowing a lifeboat.
Course Type: Technical

NAUT 1471 Introduction to Ships and Shipping 4 Credits (4 Lec, 0 Lab)
This is an introduction to the maritime industry and ships used in the transportation of goods and services. Shipboard nomenclature, types and missions of merchant ships, shipbuilding, shipbuilding materials and methods, modes of cargo handling and their impact on ship design.
Prerequisite(s): Reading level 4
Course Type: Technical

NAUT 2171 Upgrade to Apprentice Mate 1 Credit (1 Lec, 0 Lab)
This course provides instruction in subjects pertaining to a mariner in training to become master or mate (pilot) of towing vessels or master of towing vessels (harbor assist).
Course Type: Technical

NAUT 2272 Radar Observer Unlimited 2 Credits (2 Lec, 1 Lab)
This course covers the proper use of radar for risk assessment, collision avoidance, and navigation. Trainees use commercial radar equipment with landmasses, environmental effects and vessel returns generated by Transas simulation.
Course Type: Technical
NAUT 2274 Basic Stability and Ship Construction 2 Credits (2 Lec, 1 Lab)
This course provides the background knowledge for a thorough understanding of the calculations for vessel stability and trim, basic ship construction features and terminology, and principles of stability. Subjects include: ship dimensions, ship stresses, hull structure, rudders and propellers, displacement, buoyancy, static and initial stability, list, trim and free surface effect, principles, terms and procedures used in the determination of transverse, longitudinal and damage stability of ships. Also included are analyses of case studies involving loss of stability and how to perform trim and stability calculations. The course covers ship design and construction as it relates to all types of vessels as well. Topics include: hull structure and components, vessel design process, design stresses, tonnage measurements and load line assignments. This course aims to meet the mandatory minimum requirements for knowledge, understanding and proficiency in Table A-II/2 of STCW 1995 for the function Navigation at the Officer in Charge of a Navigational Watch on vessels of 500 or more gross tonnage (ITC) Level.
Course Type: Technical

NAUT 2278 Bridge Resource Management and Shiphandling 2 Credits
Bridge Watchstanding. Integration of Navigation, communications and seamanship in BRM training required under the International Convention on the Standards for Training, and Certification of Watchkeepers, using simulator based teaching techniques. This course covers turning circle and stopping distance, effects of wind and current, man overboard maneuvers, shallow water effects, anchoring and steering control systems. It also covers fundamentals of shiphandling for vessels based on double and single-screw theory. Applied instruction in ship-handling techniques, includes: backing and filling; “Y-backing”; emergency stopping; flanking; and docking and undocking; and procedures and basic anchoring. It utilizes full mission visual simulation to reinforce theoretical lessons. (2:1.5-1.5)
Course Type: Technical

NAUT 2364 Practicum 3 Credits (0 Lec, 30 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): NAUT 1374
Course Type: Technical

NAUT 2365 Practicum 3 Credits (0 Lec, 30 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Course Type: Technical

NAUT 2471 Terrestrial and Coastal Navigation 4 Credits (3 Lec, 2 Lab)
This course is designed to teach the student the technical and practical concepts of Terrestrial Navigation. Areas covered include terrestrial coordinates, nautical charts, navigation publications, plotting and position lines, navigation aids, compass corrections, set and drift, charts and chart work, logbooks. This course provides the background introductory knowledge in planning a voyage and to support the tasks, duties and responsibilities in navigating vessels up to 200 tons.
Course Type: Technical
MASSAGE THERAPY (MSSG)

MSSG 1105 Hydrotherapy 1 Credit (0 Lec, 2 Lab)
This course is a study of the use of accepted hydrotherapy and holistic healthcare modalities of external application of temperature for its reflexive effect. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 32 contact hours
Course Type: Technical

MSSG 1109 Health and Hygiene 1 Credit (1 Lec, 1 Lab)
The study of safety and sanitation practices including universal precautions. The importance of proper body mechanics, maintaining a healthy lifestyle, maintaining the massage environment, and the advantage of therapeutic relationships is also included. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 128 contact hours
Course Type: Technical

MSSG 1411 Massage Therapy Fundamentals I 4 Credits (2 Lec, 6 Lab)
This course is an introduction to the theory and the application of skills necessary to perform basic massage skills. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 128 contact hours
Course Type: Technical

MSSG 1413 Anatomy and Physiology for Massage 4 Credits (3 Lec, 2 Lab)
This course offers an in-depth coverage of the structure and function of the human body. It includes cell structure and function, tissues, body organization, and the integumentary, skeletal, muscular, and nervous, and endocrine systems, and emphasizes homeostasis/wellness care. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 80 contact hours
Course Type: Technical

MSSG 2186 Internship-Massage Therapy/Therapeutic Massage 1 Credit (0 Lec, 5 Lab)
This is a work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the College and the employer.
Course Type: Technical

MSSG 2311 Massage Therapy Fundamentals II 3 Credits (1 Lec, 4 Lab)
This course is a continuation of Massage Therapy Fundamentals I emphasizing specialized techniques and assessment of client needs to identify a specific plan of care. It completes the requirements for Massage Techniques for Licensure. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 80 contact hours
Course Type: Technical

MSSG 2313 Kinesiology for Massage 3 Credits (2 Lec, 2 Lab)
This course focuses on applied study of human kinesiology. Muscle movements and dysfunctions will be discussed and palpated. It includes theory and practice of functional muscle testing. Prerequisites or Co-requisite(s): Courses take in level sequence order or department chair approval, 64 contact hours
Course Type: Technical

MSSG 2314 Pathology for Massage 3 Credits (3 Lec, 0 Lab)
This course covers general discussion of pathologies as they relate to massage therapy. Includes universal precautions and their management in professional practice. It also covers etiology, signs, symptoms, and the physiological and psychological reactions to disease and injury. Prerequisites or Co-requisite(s): Courses taken in level sequence order or department chair approval, 48 contact hours
Course Type: Technical

MSSG 2413 Kinesiology for Massage 4 Credits (4 Lec, 0 Lab)
This course focuses on applied study of human kinesiology. Muscle movements and dysfunctions will be discussed and palpated. It includes theory and practice of functional muscle testing. Prerequisites or Co-requisite(s): Courses take in level sequence order or department chair approval, 64 contact hours
Course Type: Technical

MSSG 55000 Chair Massage 1.6 Credits
Therapy and practice of chair massage using proper techniques for a variety of settings. (MSSG 2101)

MSSG 55001 Pathology for Massage 4.8 Credits
Prerequisite(s): Reading level 4 and courses taken in level sequence order or department chair approval. General discussion of pathologies as they relate to massage therapy. Includes universal precautions and their management in professional practice. Also covers etiology, signs, symptoms, and the physiological and psychological reactions to disease and injury. Meets the minimum 40-contact hour for licensure. (MSSG 2114)

MSSG 55002 Kinesiology for Massage 6.4 Credits
Prerequisite(s): Reading level 4 and courses taken in level sequence order or department chair approval. Applied study of human kinesiology. Muscle movements and dysfunctions will be discussed and palpated. Includes theory and practice of functional muscle testing. Meets the minimum 50-contact hour requirement for licensure. (MSSG 2131)

MSSG 55003 Internship-Massage 6.4 Credits
A work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. A learning plan is developed by the college and the employer. (MSSG 2186)

MSSG 55004 Massage Therapy Fundamentals II 8 Credits
Prerequisite(s): Reading level 4 and courses taken in level sequence order or department chair approval. A continuation of Massage Therapy Fundamentals I. Emphasizes specialized techniques and assessment of client needs to identify a specific plan of care. Completes the requirements for Massage Techniques for licensure. (MSSG 2311)
MSSG 55005 Health & Hygiene 3.2 Credits
This course is the study of safety and sanitation practices including universal precautions. The importance of proper body mechanics, maintaining a healthy lifestyle, maintaining the massage environment, and the advantage of therapeutic relationships is also included. It meets the minimum 20 contact hour requirement for licensure. (MSSG 1109)

MSSG 55006 Anatomy/Physiology for Massage 8 Credits
This course offers an in-depth coverage of the structure and function of the human body. It includes cell structure and function, tissues, body organization, and the integumentary, skeletal, muscular, and nervous, and endocrine systems, and emphasizes homeostasis/wellness care. It meets the minimum 75 contact hour requirement for Anatomy and Physiology for licensure. (MSSG 1413)

MSSG 55007 Hydrotherapy/Therapeutic Modalities 3.2 Credits
This course is a study of the use of accepted hydrotherapy and holistic health care modalities of external application of temperature for its reflexive effect. It meets the minimum 20 contact hour requirement for licensure. (MSSG 1105)

MSSG 55008 Massage Therapy Fundamentals I 12.8 Credits
Prerequisite(s): Reading level 4 and courses taken in level sequence order or department chair approval. This course is an introduction to the theory and the application of skills necessary to perform basic massage skills. (MSSG 1411)
MATH 0104 NCBO Preparation for Academic Mathematics 1 Credit (1 Lec, 0 Lab)
This NCBO supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. Prerequisite(s): Math level 4. Co-require: MATH 0314 or MATH 0324
Course Type: College Prep

MATH 0111 NCBO for Algebraic Pathways 1 Credit (1 Lec, 0 Lab)
This course is intended for students who nearly place into a transfer-level math course. The course includes the study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. The use of an online software package is required. Prerequisite(s): Math level 6. Co-require: MATH 1314 or MATH 1324
Course Type: College Prep

MATH 0314 Algebraic Foundations 3 Credits (3 Lec, 1 Lab)
This course is a study of the basic algebraic concepts necessary for success in MATH 1314 (College Algebra) to include exponent rules, radical and rational expressions, and the solution of equations and inequalities. This course is not applicable toward any degree. Prerequisite(s): A grade of C or better is required for MATH 0104 or Math level 6. Reading level 7.
Course Type: College Prep

MATH 0324 Foundations in Business and Social Sciences 3 Credits (3 Lec, 1 Lab)
This course is the study of the basic algebraic concepts necessary for success in MATH 1324 (Math for Business and Social Sciences), to include exponent rules, radical and rational expressions, and the solution of equations and inequalities. This course is not applicable toward any degree. Prerequisite(s): Math level 6. Reading level 7.
Course Type: College Prep

MATH 0332 Foundations of Mathematical Reasoning 3 Credits (3 Lec, 0 Lab)
This course is a study of the basic concepts necessary for success in MATH 1332 to include numeracy, proportional reasoning, probabilistic reasoning to assess risk, quantitative reasoning in personal finance and civic life, algebraic competence, reasoning, modeling, probability, collection and interpretation of data. This course is not applicable towards any degree. Prerequisite(s): Reading level 7, Math level 4
Course Type: College Prep

MATH 0342 Foundations in Statistics 3 Credits (3 Lec, 0 Lab)
This course is a study of the basic concepts necessary for success in MATH 1342 to include numeracy, proportional reasoning, probabilistic reasoning to assess risk, quantitative reasoning in personal finance and civic life, and algebraic competence, reasoning, modeling, probability, collection and interpretation of data. This course is not applicable towards any degree. Prerequisite(s): Reading level 7, Math level 4
Course Type: College Prep

MATH 1314 College Algebra 3 Credits (3 Lec, 0 Lab)
This course is an in-depth study and application of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. A grade of C or better is required for MATH 0314 or MATH 0324. Prerequisite(s): Math level 9.
Course Type: Academic

MATH 1316 Plane Trigonometry 3 Credits (3 Lec, 0 Lab)
This course is an in-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Prerequisite(s): MATH 1314 or approval by department chair
Course Type: Academic

MATH 1324 Mathematics for Business and Social Sciences 3 Credits (3 Lec, 0 Lab)
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. A grade of C or better is required for MATH 0314 or MATH 0324. Prerequisite(s): Math level 9
Course Type: Academic

MATH 1325 Calculus for Business and Social Sciences 3 Credits (3 Lec, 0 Lab)
This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Prerequisite(s): MATH 1314 or MATH 1324 (The content of MATH 1325 is expected to be below the content level of MATH 2413)
Course Type: Academic
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) 3 Credits (3 Lec, 0 Lab)
This course contains topics that include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. A grade of C or better is required for MATH 0332 or MATH 0342.
Prerequisite(s): Math level 8.
Course Type: Academic

MATH 1342 Elementary Statistical Methods (Statistics) 3 Credits (3 Lec, 0 Lab)
This course covers collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. A grade of C or better is required for MATH 0342 or MATH 0332.
Prerequisite(s): Math level 8
Course Type: Academic

MATH 1350 Mathematics for Teachers I (Fundamentals of Mathematics I) 3 Credits (3 Lec, 0 Lab)
This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek EC-8 teacher certification.
Prerequisite(s): MATH 1314
Course Type: Academic

MATH 1351 Mathematics for Teachers II (Fundamentals of Mathematics II) 3 Credits (3 Lec, 0 Lab)
This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking.
Prerequisite(s): MATH 1314 or approval by department chair
Course Type: Academic

MATH 2318 Linear Algebra 3 Credits (3 Lec, 0 Lab)
This course introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering.
Prerequisite(s): MATH 2414
Course Type: Academic

MATH 2320 Differential Equations 3 Credits (3 Lec, 0 Lab)
This course focuses on ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems.
Prerequisite(s): MATH 2414
Course Type: Academic

MATH 2412 Pre-Calculus Math 4 Credits (4 Lec, 0 Lab)
This course is an in-depth combined study of algebra, trigonometry, and other topics for calculus readiness.
Prerequisite(s): MATH 1314 or approval by department chair
Course Type: Academic

MATH 2413 Calculus I 4 Credits (4 Lec, 0 Lab)
This course covers limits and continuity, the Fundamental Theorem of Calculus, the definition of the derivative of a function, techniques of differentiation, applications of the derivative to maximizing or minimizing a function, the chain rule, mean value theorem, and rate of change problems, curve sketching, definite and indefinite integration of elementary functions with an application to the calculation of areas.
Prerequisite(s): MATH 2412 or equivalent preparation
Course Type: Academic

MATH 2414 Calculus II 4 Credits (4 Lec, 0 Lab)
This course covers differentiation and integration of transcendental functions, parametric equations and polar coordinates, techniques of integration, sequences and series, improper integrals.
Prerequisite(s): MATH 2413
Course Type: Academic

MATH 2415 Calculus III 4 Credits (4 Lec, 0 Lab)
This course focuses on advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green’s Theorem, the Divergence Theorem, and Stokes’ Theorem.
Prerequisite(s): MATH 2414
Course Type: Academic

MATH 2421 Differential Equations and Linear Algebra (for Engineers) 4 Credits (3 Lec, 2 Lab)
This course emphasizes solution techniques. Ordinary differential equations, vector spaces, linear transformations, matrix/vector algebra, eigenvectors, Laplace Transform, and systems of equations. (This course is included in the Field of Study Curriculum for Engineering.)
Prerequisite(s): MATH 2414
Course Type: Academic
**MEDICAL ASSISTING (MDCA)**

**MDCA 1202** Human Disease/Pathology 2 Credits
Course Type: Technical

**MDCA 1205** Medical Law and Ethics 2 Credits (2 Lec, 0 Lab)
This course covers instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants in ambulatory care settings.
Course Type: Technical

**MDCA 1208** Anatomy Physiology 2 Credits
Course Type: Technical

**MDCA 1254** Medical Assisting Credentialing Exam Review 2 Credits (1 Lec, 2 Lab)
This is a preparation for the Certified Medical Assistant (American Association of Medical Assistants) or Registered Medical Assistant (American Medical Technologists) credentialing exam.
Course Type: Technical

**MDCA 1302** Human Disease/Pathophysiology 3 Credits (3 Lec, 0 Lab)
This is a study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems.
Course Type: Technical

**MDCA 1309** Anatomy and Physiology for Medical Assistants 3 Credits (3 Lec, 1 Lab)
This course emphasizes structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology.
Course Type: Technical

**MDCA 1310** Medical Assistant Interpersonal and Communication Skills 3 Credits (3 Lec, 0 Lab)
This course emphasizes the application of basic psychological principles and the study of behavior as they apply to special populations. Topics include procedures for self-understanding and social adaptability in interpersonal communication with patients and co-workers in an ambulatory care setting.
Course Type: Technical

**MDCA 1313** Medical Terminology 3 Credits (3 Lec, 0 Lab)
This is a study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots and combining forms.
Course Type: Technical

**MDCA 1343** Medical Insurance 3 Credits (2 Lec, 2 Lab)
This course emphasizes medical office coding procedures for payment and reimbursement by patient or third party payers for ambulatory care settings.
Course Type: Technical

**MDCA 1417** Procedures in a Clinical Setting 4 Credits (2 Lec, 4 Lab)
This course emphasizes patient assessment, examination, and treatment as directed by physicians. It includes vital signs, collection and documentation of patient information, asepsis, office clinical procedures, and other treatments as appropriate for ambulatory care settings.
Prerequisite(s): MDCA 1421
Course Type: Technical

**MDCA 1421** Administrative Procedures 4 Credits (2 Lec, 6 Lab)
This course focuses on medical office procedures including appointment scheduling, medical records creation and maintenance, interpersonal communications, bookkeeping tasks, coding, billing, collecting, third party reimbursement, credit arrangements, and computer use in the medical office.
Course Type: Technical

**MDCA 1448** Pharmacology and Administration of Medications 4 Credits (3 Lec, 3 Lab)
This course covers instruction in concepts and application of pharmacological principles. It focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant.
Course Type: Technical

**MDCA 1560** Clinical - Medical/Clinical Assistant 5 Credits (0 Lec, 15 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional (faculty or Preceptor), generally in a clinical setting. Clinical education is an unpaid learning experience.
Prerequisite(s): MDCA 1417.
Course Type: Technical
MDCA 41000 Basic Medical Assistant Technology 0.7-3.2 Credits
MDCA 41002 Human Disease/Pathophysiology 4.8-9.6 Credits
MDCA 41005 Medical Law and Ethics 3.2-6.4 Credits
MDCA 41009 Anatomy and Physiology for Medical Assistants 4.8-9.6 Credits
MDCA 41013 Medical Terminology 3.2-8 Credits
MDCA 41017 Procedures in a Clinical Setting 4.8-17.6 Credits
MDCA 41021 Administrative Procedures 3.2-12.8 Credits
MDCA 41043 Medical Insurance 3.2-9.6 Credits
MDCA 41044 Electrocardiography (EKG) 4.8-9.6 Credits
MDCA 41048 Pharmacology & Administration 4.8-9.6 Credits
MDCA 41052 Medical Assistant Laboratory Procedures 4.8-9.6 Credits
MDCA 41054 Certified Medical Assisting Exam 1.6-6.4 Credits
MDCA 41056 Phlebotomy (for Medical Assistants) 3.2-9.6 Credits
MDCA 41060 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 41061 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 41062 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 41063 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 41064 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41065 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41066 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41067 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41068 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41069 Practicum (or Field Experience) 11.2-64 Credits
MDCA 41091 Special Topics in Medical Assisting 0.7-11.2 Credits
MDCA 42031 Advanced Medical Assistant Technology 1.6-6.4 Credits
MDCA 42060 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 42061 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 42062 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 42063 Clinical - Medical Assistant 4.8-57.6 Credits
MDCA 42064 Practicum (or Field Experience) 11.2-64 Credits
MDCA 42065 Practicum (or Field Experience) 11.2-64 Credits
MDCA 42066 Practicum (or Field Experience) 11.2-64 Credits
MDCA 42067 Practicum (or Field Experience) 11.2-64 Credits
MDCA 42068 Practicum (or Field Experience) 11.2-64 Credits
MDCA 42069 Practicum (or Field Experience) 11.2-64 Credits
MDCA 55000 Pathophysiology for Medical Office Professionals 5.6 Credits
MDCA 55001 Medical Office Professional 9 Credits

MDCA 55003 Patient Access Fundamentals 4.8 Credits
Prerequisite(s): High school diploma or equivalent. This comprehensive 48 hour course provides the key terms, processes, guidelines and principles for a successful career in the field of Patient Access Services including healthcare functions such as Admissions, Registration, Insurance Verification, Managed Care, Financial Counseling, Pre-Registration, Pre-Certification, Customer Relations and Scheduling. Individuals completing the Patient Access coursework are eligible to take the Certified Healthcare Access Associate Certification Examination. Note: Materials provided.

MDCA 55004 Patient Access Practicum 15 Credits
Prerequisite(s): Successful completion of Patient Access Fundamentals. Practical training at an approved site. Provides short-term interaction to foster career education, shadowing, and mentoring. Individualized learning plan designed to provide an opportunity to explore a career in Patient Access Services. Note: Materials provided.

MDCA 55005 ST: Medical Office Professional 9 Credits
Prerequisite(s): None. This class will prepare you to work in a medical office setting and will provide a foundation for more advanced medical records careers. The content includes basic office procedures, medical records administration, medical terminology, and pathophysiology. This course is the prerequisite course for AAPC Medical Coding Curriculum for CPC Certification. Note: Textbooks Included.

MDCA 55006 Technical Skills for Medical Receptionists 0.8 Credits
Prerequisite(s): None. This class provides the skills necessary for medical receptionist. It will begin with a pre-test to determine basic skill level and will end with a post-test that ensures the skills taught have been mastered. At the conclusion of the training, trainees will be able to communicate better with patients and potential patients, explain the billing and collection process to patients and potential patients. Ascertain facts of a patient’s medical needs and schedule appropriate services on a timeline that fits the patients’ and the doctors’ needs. Use patient feedback to improve operations, practice excellent telephone and email communication techniques, and troubleshoot problems as they arise. Note: Materials provided.

MDCA 55007 Computerized Patient Management 4.8 Credits
Prerequisite(s): Basic medical office knowledge. Note: Textbook is required. Flash drive is required. You will begin with learning basic computer knowledge. Then you will learn the language and the importance of Health Insurance Portability and Accountability Act (HIPAA) regarding privacy of electronic records, CPT-4 and ICD-9 codes for security purposes. Next, you will cover the basic components of Practice Management Software and Front and Back Office Procedures including consult referrals using a generic Medical Office Simulation Software. Starting with appointment scheduling, you will move to electronically registering patients, posting procedures, performing manual and electronic medical billing, posting payments, billing for secondary insurance and performing patient collections.

MDCA 55008 Medical Coding Curriculum for CPC Certification. Note: Textbook is required. This course is the prerequisite course for AAPC Medical Coding Curriculum for CPC Certification.
MEDICAL IMAGING (CTMT)

CTMT 2336  Computed Tomography Equipment and Methodology  3 Credits  (3 Lec, 0 Lab)
This is a study of the actual operation and operational control of computed tomographic equipment, this course focuses on routine protocols, image quality, and quality control of computed tomography. Theory and application of computed tomographic equipment and the principles of patient imaging techniques utilizing the equipment are covered.
Prerequisite(s): ARRT certified or registry eligible.
Course Type: Technical

CTMT 2360  Clinical 1 - Computed Tomography Technology/Technician  3 Credits  (0 Lec, 12 Lab)
This is an advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional in a clinical setting.
Prerequisite(s): ARRT certified with Instructor approval, and Prerequisite or Co-requisite(s): CTMT 2336
Course Type: Technical

CTMT 2361  Clinical 2 - Computed Tomography Technology/Technician  3 Credits  (0 Lec, 12 Lab)
This is an advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional in clinical setting.
Prerequisite(s): ARRT certified with Instructor approval, and Prerequisite or Co-requisite(s): CTMT 2336
Course Type: Technical

CTMT 4060  Clinical - Computed Tomography  4.8-57.6 Credits
CTMT 4064  Practicum (or Field Experience  11.2-64 Credits
CTMT 4091  Special Topics in Computed Tom  0.7-11.2 Credits
CTMT 42036  Computed Tomography Equipment  3.2-9.6 Credits
CTMT 42060  Clinical - Computed Tomography  4.8-57.6 Credits
CTMT 42061  Clinical - Computed Tomography  4.8-57.6 Credits
CTMT 42062  Clinical - Computed Tomography  4.8-57.6 Credits
CTMT 42063  Clinical - Computed Tomography  4.8-57.6 Credits
CTMT 42064  Practicum (or Field Experience  11.2-64 Credits
CTMT 42065  Practicum (or Field Experience  11.2-64 Credits
CTMT 42066  Practicum (or Field Experience  11.2-64 Credits
CTMT 42067  Practicum (or Field Experience  11.2-64 Credits
CTMT 42068  Practicum (or Field Experience  11.2-64 Credits
CTMT 42069  Practicum (or Field Experience  11.2-64 Credits
CTMT 55001  Clinical I  Computed Tomography  16 Credits
Prerequisite(s): Sectional Anatomy for Medical Imaging, or Department approval at 281-476-1501 X1418. Note: Textbook is required. This is an advanced type of health profession work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practice experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional in a clinical setting. (CTMT 2360)

CTMT 55002  Clinical II  Computed Tomography  16 Credits
Prerequisite(s): Clinical I  Computed Tomography, Computed Tomography Equipment and Methodology, or Department approval at 281-476-1501 X1418. Note: Textbook is required. This is a continuation of Clinical I. It also provides an advanced type of health profession work-based instruction that helps students synthesize new knowledge, apply previous knowledge or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional in a clinical setting. (CTMT 2361)

CTMT 55003  Computed Tomography Equipment and Methodology  4.8 Credits
Prerequisite(s): Clinical I - Computed Tomography, and must have current national registration in X-ray (ARRT), Nuclear Medicine (NMTCB or ARRT) or Radiation Therapy (ARRT) or Department approval at 281-476-1501 X1418. Note: Textbook is required. The concepts and physical principles employed in computed tomography are discussed. The course material emphasizes interactions between X-rays and matter with concepts of radiation detectors and digital imaging. Current knowledge and theory of the biological effects of X-rays are explored, with an emphasis on how they relate to data acquisition, image production and control and manipulation of image production. This course also provides skill development in the operation of computed tomographic equipment, focusing on routine protocols, image quality, quality-assurance and radiation protection. Category A CE credit is approved by the ASRT. (CTMT 2336).
MEDICAL IMAGING (DMSO)

DMSO 1110 Introduction to Sonography 1 Credit (1 Lec, 0 Lab)
This course provides an introduction to the profession of sonography and the role of the sonographer. Emphasis is on medical terminology, ethical/legal aspects, written and verbal communication, and professional issues relating to registry, accreditation, professional organizations and history of the profession.
Prerequisite(s): Departmental approval required.
Course Type: Technical

DMSO 1166 Practicum I - Diagnostic Medical Sonography 1 Credit (0 Lec, 7 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Course Type: Technical

DMSO 1251 Sonographic Sectional Anatomy 2 Credits (2 Lec, 1 Lab)
This course covers sectional anatomy of the male and female body. It includes anatomical relationships of organs, vascular structures, and body planes and quadrants.
Course Type: Technical

DMSO 1266 Practicum II - Diagnostic Medical Sonography 2 Credits (0 Lec, 16 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): DMSO 1110, 1302, 1441, 1251.
Course Type: Technical

DMSO 1267 Practicum III - Diagnostic Medical Sonography 2 Credits (0 Lec, 18 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): DMSO 1260, 1210, 2405.
Course Type: Technical

DMSO 1302 Basic Ultrasound Physics 3 Credits (3 Lec, 1 Lab)
This course covers basic acoustical physics and acoustical waves in human tissue. This covers ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams.
Prerequisite(s): acceptance into the ultrasound program
Course Type: Technical

DMSO 1342 Intermediate Ultrasound Physics 3 Credits (3 Lec, 1 Lab)
This course is a continuation of Basic Ultrasound Physics. Includes interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, and image artifacts. May introduce methods of Doppler flow analysis.
Prerequisite(s): Departmental approval required.
Course Type: Technical

DMSO 1355 Sonographic Pathophysiology 3 Credits (3 Lec, 1 Lab)
The course covers pathology and pathophysiology of the abdominal structures visualized with ultrasound. Includes abdomen, pelvis, and superficial structures.
Prerequisite(s): DMSO 1251, 1110, 1302, 1441
Course Type: Technical

DMSO 1367 Practicum IV - Diagnostic Medical Sonography 3 Credits (0 Lec, 24 Lab)
This is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Course Type: Technical

DMSO 1441 Abdominopelvic Sonography 4 Credits (3 Lec, 4 Lab)
This course covers normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols.
Prerequisite(s): Departmental approval required.
Course Type: Technical

DMSO 2230 Advanced Ultrasound and Review 2 Credits (1 Lec, 4 Lab)
This course provides knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development.
Course Type: Technical

DMSO 2245 Advanced Sonography Practices 2 Credits (2 Lec, 0 Lab)
This course covers exploration of advanced sonographic procedures and emerging ultrasound applications.
Course Type: Technical

DMSO 2253 Sonography of Superficial Structures 2 Credits (2 Lec, 1 Lab)
This course is a detailed study of the pelvis and obstetrics/gynecology structures visualized with ultrasound. Includes abdomen, pelvis, and superficial structures.
Prerequisite(s): Departmental approval required.
Course Type: Technical

DMSO 2342 Sonography of High Risk Obstetrics 3 Credits (3 Lec, 1 Lab)
This course covers maternal disease and fetal abnormalities. Includes scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.
Prerequisite(s): DMSO 1260, 1210, 2405.
Course Type: Technical

DMSO 2343 Advanced Ultrasound Physics 3 Credits (3 Lec, 0 Lab)
This course covers theory and application of ultrasound principles. Includes advances in ultrasound technology.
Course Type: Technical

DMSO 2405 Sonography of Obstetrics/Gynecology 4 Credits (3 Lec, 3 Lab)
This course is a detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.
Prerequisite(s): Departmental approval required.
Course Type: Technical
MEDICAL IMAGING (MRIT)

MRIT 2330 Principles of Magnetic Resonance Imaging 3 Credits (3 Lec, 0 Lab)
This course is an in-depth coverage of magnetic resonance imaging techniques. Image quality assurance and safety protocols are emphasized.
Prerequisite(s): ARRT registered or registry eligible, or department approval.
Course Type: Technical

MRIT 2334 Magnetic Resonance Equipment and Methodology 3 Credits (3 Lec, 0 Lab)
This course covers skill development in the operation of magnetic resonance imaging equipment, focusing on routine procedures and safety protocols, image quality, and quality assurance.
Prerequisite(s): RADR 2340, MRIT 2360, MRIT 2330, or departmental approval.
Course Type: Technical

MRIT 2360 Clinical I - Radiologic Technology/Science - Radiographer 3 Credits (0 Lec, 18 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): ARRT registered or registry eligible or departmental approval.
Course Type: Technical

MRIT 2461 Clinical II - Radiologic Technology/Science - Radiographer 4 Credits (0 Lec, 20 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Course Type: Technical

MRIT 41060 Clinical - Magnetic Resonance 4.8-57.6 Credits
MRIT 41064 Practicum (or Field Experience 11.2-64 Credits
MRIT 41091 Special Topics in Magnetic Resonance Imaging 0.7-11.2 Credits
MRIT 42030 Principles of Magnetic Resonance Imaging 3.2-9.6 Credits
MRIT 42034 Magnetic Resonance Equipment and Methodology 3.2-9.6 Credits
MRIT 42060 Clinical - Magnetic Resonance Imaging 4.8-57.6 Credits
MRIT 42061 Clinical - Magnetic Resonance Imaging 4.8-57.6 Credits
MRIT 42062 Clinical - Magnetic Resonance Imaging 4.8-57.6 Credits
MRIT 42063 Clinical - Magnetic Resonance Imaging 4.8-57.6 Credits
MRIT 42064 Practicum (or Field Experience 11.2-64 Credits
MRIT 42065 Practicum (or Field Experience 11.2-64 Credits
MRIT 42066 Practicum (or Field Experience 11.2-64 Credits
MRIT 42067 Practicum (or Field Experience 11.2-64 Credits
MRIT 42068 Practicum (or Field Experience 11.2-64 Credits
MRIT 42069 Practicum (or Field Experience 11.2-64 Credits
MRIT 55000 Principles of Magnetic Resonance Imaging 4.8 Credits
Prerequisite(s): Must have current national registration in X-ray (ARRT), Nuclear Medicine (NMTCB or ARRT) or Radiation Therapy (ARRT). Call 281-476-1501 X1354 for approval to register. Note: Textbook is required. Focuses on the underlying scientific theory and practice leading to magnetic resonance imaging. Includes the concepts and scientific principles employed in magnetic resonance imaging techniques. Emphasis on principles of magnetism and interactions of living matter within magnetic fields. Category A CE credit is approved by the ASRT. (MRIT 2330).

MRIT 55001 Clinical I - Magnetic Resonance Imaging Technology 28.8 Credits
Prerequisite(s): ARRT registered or registry eligible and department approval. Call 281-476-1501 X1354 for approval to register. Note: NO ASRT CE hours. Textbook is required. This course is a health-related work-based learning experience that enables a student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (MRIT 2360).

MRIT 55002 Clinical - Radiologic Technology/Science - Radiographer 32 Credits
Prerequisite(s): Department approval required. Call 281-476-1501 X1354 for approval to register. Note: NO ASRT CE hours. Textbook is required. This course is a health-related work-based learning experience that enables a student to apply specialized occupational theory, skills and concepts. Direct supervision is provided by the clinical professional. (MRIT 2361)

MRIT 55003 Magnetic Resonance Equipment and Methodology 4.8 Credits
Prerequisite(s): RADR 2340, MRIT 2330, and must have current national registration in X-ray (ARRT), Nuclear Medicine (NMTCB or ARRT) or Radiation Therapy (ARRT); call 281-476-1501 X1354 for approval to register. Note: Textbook is required. Operation of magnetic resonance imaging equipment. Focuses on routine protocols, image quality, and quality control of magnetic resonance imaging. Includes theory and application of magnetic resonance imaging equipment and the principles of patient imaging techniques utilizing the equipment. Category A CE credit is approved by ASRT. (MRIT 2334)
MEDICAL IMAGING (RADR)

RADR 1201 Introduction to Radiography 2 Credits (2 Lec, 0 Lab)
This course is an overview of the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the profession and the health care system.
Prerequisite(s): Reading level 7. Prerequisite or Co-requisite(s): ENGL 1301
Course Type: Technical

RADR 1202 Radiographic Image Evaluation I 2 Credits (2 Lec, 1 Lab)
This course is the study of the scientific process of radiographic image evaluation.
Prerequisite(s): Completion of all second semester RADR courses; concurrent enrollment in RADR 1313 and RADR 2401
Course Type: Technical

RADR 1203 Patient Care 2 Credits (2 Lec, 1 Lab)
This course is an introduction in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology.
Prerequisite(s): Acceptance into the Medical Radiography Program.
Course Type: Technical

RADR 1213 Principles of Radiographic Imaging I 2 Credits (2 Lec, 1 Lab)
This course is the study of radiographic image quality and the effects of exposure variables.
Prerequisite(s): RADR 2209, 1311, 1202, 1203, 1166
Course Type: Technical

RADR 1250 Radiographic Image Evaluation II 2 Credits (2 Lec, 1 Lab)
This course is the study of the assessment of radiographic images.
Prerequisite(s): Completion of all second semester RADR courses. Concurrent enrollment in RADR 2401 and RADR 1266.
Course Type: Technical

RADR 1266 Practicum 2 Credits (0 Lec, 16 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): Completion of all first semester RADR courses. Concurrent enrollment in RADR 1203 and RADR 1411.
Course Type: Technical

RADR 1267 Practicum 2 Credits (0 Lec, 16 Lab)
This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, college, and student.
Prerequisite(s): Completion of all second semester RADR courses. Concurrent enrollment in RADR 1266 and RADR 2401.
Course Type: Technical

RADR 1311 Basic Radiographic Procedures 3 Credits (2 Lec, 3 Lab)
This course is an introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of basic anatomy.
Prerequisite(s): Acceptance into the Medical Radiography Program
Course Type: Technical

RADR 1313 Principles of Radiographic Imaging I 3 Credits (3 Lec, 1 Lab)
This course is the study of radiographic image quality and the effects of exposure variables.
Prerequisite(s): Completion of all first semester RADR courses; concurrent enrollment in RADR 2209 and 1411
Course Type: Technical

RADR 1411 Basic Radiographic Procedures 4 Credits (3 Lec, 3 Lab)
This course is an introduction to radiographic positioning terminology, the manipulation of equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for demonstration of basic anatomy.
Prerequisite(s): Acceptance into the Medical Radiography Program
Course Type: Technical

RADR 2209 Radiographic Imaging Equipment 2 Credits (2 Lec, 0 Lab)
This course is the study of the equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.
Prerequisite(s): Acceptance into the Medical Radiography Program
Course Type: Technical

RADR 2217 Radiographic Pathology 2 Credits (2 Lec, 0 Lab)
This course is the study of the disease processes and their appearance on radiographic images.
Prerequisite(s): RADR 2233, 2313, 2266
Course Type: Technical

RADR 2233 Advanced Medical Imaging 2 Credits (2 Lec, 0 Lab)
This course is an exploration of specialized imaging modalities. Includes concepts and theories of equipment operations and their integration for medical diagnosis.
Prerequisite(s): Completion of all third semester RADR courses. Concurrent enrollment in RADR 1267 and RADR 2305.
Course Type: Technical

RADR 2236 Special Patient Applications 2 Credits (2 Lec, 1 Lab)
This course is the study of the advanced concepts of pediatrics, geriatrics, trauma, history documentation and electrocardiogram (ECG). Includes phlebotomy, venipuncture and concepts of pharmacology.
Prerequisite(s): Completion of all first semester RADR courses. Concurrent enrollment in RADR 1203 and RADR 1411.
Course Type: Technical
RADR 2266 Practicum 2 Credits (0 Lec, 20 Lab)
This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, college, and student.
Prerequisite(s): Completion of all third semester RADR courses.
Concurrent enrollment in RADR 1267 and RADR 2331.
Course Type: Technical

RADR 2267 Practicum 2 Credits (0 Lec, 20 Lab)
This course is the study of the practical, general workplace training supported by an individualized learning plan/syllabus developed by the employer, college, and student.
Prerequisite(s): RADR 2266, 2313, 2233
Course Type: Technical

RADR 2301 Intermediate Radiographic Procedures 3 Credits (2 Lec, 3 Lab)
This course is a continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of anatomy.
Prerequisite(s): RADR 1311, 1166, 1202, 1203, 2209
Course Type: Technical

RADR 2305 Principles of Radiographic Imaging II 3 Credits (3 Lec, 1 Lab)
This is a continuation of Radiographic image quality and the effects of exposure variables, and the synthesis of all variables in image production.
Prerequisite(s): Completion of all second semester RADR courses.
Concurrent enrollment in RADR 1313 and RADR 1266.
Course Type: Technical

RADR 2313 Radiation Biology and Protection 3 Credits (3 Lec, 0 Lab)
This course is the study of the effects of radiation exposure on biological systems. Includes typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure.
Prerequisite(s): Completion of all third semester RADR courses.
Concurrent enrollment in RADR 1267 and RADR 2331.
Course Type: Technical

RADR 2331 Advanced Radiographic Procedures 3 Credits (2 Lec, 2 Lab)
This course is a continuation of positioning and alignment of anatomic structures and equipment, evaluation of images for demonstration of anatomy and related pathology.
Prerequisite(s): Completion of all second semester RADR courses.
Concurrent enrollment in RADR 2401 and RADR 1266.
Course Type: Technical

RADR 2333 Advanced Medical Imaging 3 Credits (3 Lec, 0 Lab)
This course covers specialized imaging modalities. Includes concepts and theories of equipment operations and their integration for medical diagnosis.
Prerequisite(s): RADR 2360 and 2309
Course Type: Technical

RADR 2335 Radiologic Technology Seminar 3 Credits (3 Lec, 1 Lab)
This is a capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning.
Prerequisite(s): RADR 2233, 2313, 2266
Course Type: Technical

RADR 2340 Sectional Anatomy for Medical Imaging 3 Credits (3 Lec, 0 Lab)
This course presents an in-depth coverage of anatomic relationships that are present under various sectional orientations.
Prerequisite(s): ARRT registered or registry eligible within 6 months or departmental approval.
Course Type: Technical

RADR 2401 Intermediate Radiographic Procedures 4 Credits (3 Lec, 3 Lab)
This course is a continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomic structure and equipment, and evaluation of images for proper demonstration of anatomy.
Prerequisite(s): Completion of all first semester RADR course; concurrent enrollment in RADR 1203 and 1411
Course Type: Technical

RADR 41000 Basics of Medical Radiography 1.6-8 Credits
RADR 41002 Radiographic Image Evaluation 3.2-9.6 Credits
RADR 41050 Radiographic Image Evaluation 3.2-9.6 Credits
RADR 41091 Special Topics in Medical Radi 0.7-11.2 Credits
RADR 42040 Sectional Anatomy for Medical 3.2-4.8 Credits
RADR 55000 Sectional Anatomy for Medical Imaging 4.8 Credits
Prerequisite(s): Must have current national registration in X-ray (ARRT), Nuclear Medicine (NMTCB or ARRT) or Radiation Therapy (ARRT).
Contact 281-476-1501 X1446 for approval to register. Note: Textbook is required. This class is online. It designed to familiarize the student with anatomic relationships that are present under various sectional orientations as depicted by Computed Tomography, Magnetic Resonance Imaging, or Ultra-sonography. Category A CE credit is approved by the ASRT. (RADR 2340).

RADR 55001 Radiographic Pathology 2 Credits
RADR 55002 Radiologic Technology Seminar 4 Credits
## MEDICAL LABORATORY TECH (MLAB)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Course Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLAB 1101</td>
<td>Introduction to Clinical Laboratory Science</td>
<td>1</td>
<td>MLAB 1101 or department chair. It is an introduction to medical laboratory science, structure, equipment and philosophy.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 1227</td>
<td>Coagulation</td>
<td>2</td>
<td>MLAB 1101; Coagulation theory, procedures, and practical applications. It includes quality control, quality assurance, safety and laboratory procedures which rely on commonly performed manual and/or semi-automated methods.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 1231</td>
<td>Parasitology/Mycology</td>
<td>2</td>
<td>MLAB 1101; Parasitology is a study of human parasites and fungi, including the practical application of laboratory procedures, quality control, quality assurance, and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 1235</td>
<td>Immunology/Serology</td>
<td>2</td>
<td>MLAB 1101; Immunology is an introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures as well as quality control, quality assurance, and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 1311</td>
<td>Urinalysis and Body Fluids</td>
<td>3</td>
<td>MLAB 1101; Urinalysis is an introduction to the study of urine and body fluid analysis. It includes the anatomy and physiology of the kidney, physical, chemical and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 1415</td>
<td>Hematology</td>
<td>4</td>
<td>MLAB 1101; Hematology is a study of blood cells in normal and abnormal conditions. It includes instruction in the theory and practical application of hematology procedures, including quality control, quality assurance, safety, manual and/or automated methods as well as blood cell maturation sequences, and normal and abnormal morphology with associated diseases.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2166</td>
<td>Practicum I-Medical Laboratory Technician</td>
<td>1</td>
<td>MLAB 2434; Practicum I is a study of blood antigens and antibodies. Presents quality control/basic laboratory technique and safety. Include the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2238</td>
<td>Advanced Topic in Medical Laboratory Technician</td>
<td>2</td>
<td>MLAB 2431; Advanced Topic is an introduction to the principles, procedures, physiological basis, and significance of testing performed in Immunohematology. Includes quality control, reference values, and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2266</td>
<td>Practicum II-Medical Laboratory Technician</td>
<td>2</td>
<td>MLAB 2431; Practicum II is a study of blood antigens and antibodies. Presents quality control/basic laboratory technique and safety. Include the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2267</td>
<td>Practicum III-Medical Laboratory Technician</td>
<td>2</td>
<td>MLAB 2501; Practicum III is an introduction to the principles, procedures, physiological basis, and significance of testing performed in Immunohematology. Includes quality control, reference values, and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2401</td>
<td>Clinical Chemistry</td>
<td>4</td>
<td>MLAB 2431; Clinical Chemistry is an introduction to the principles, procedures, physiological basis, and significance of testing performed in Immunohematology. Includes quality control, reference values, and safety.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2431</td>
<td>Immunohematology</td>
<td>4</td>
<td>MLAB 2431; Immunohematology is a study of blood antigens and antibodies. Presents quality control/basic laboratory technique and safety. Include the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.</td>
<td>Technical</td>
</tr>
<tr>
<td>MLAB 2434</td>
<td>Clinical Microbiology</td>
<td>4</td>
<td>MLAB 1101 or department chair approval; Clinical Microbiology is a course covering instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, quality control, quality assurance, safety, setup, identification, susceptibility testing, and reporting results.</td>
<td>Technical</td>
</tr>
</tbody>
</table>
MLAB 41001 Introduction to Clinical Labor 1.6-8 Credits
MLAB 41060 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 41061 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 41062 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 41063 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 41064 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41065 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41066 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41067 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41068 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41069 Practicum (or Field Experience) 11.2-64 Credits
MLAB 41091 Special Topics in Medical Lab 0.7-11.2 Credits
MLAB 42038 Advanced Topics in Medical Lab 3.2-9.6 Credits
MLAB 42060 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 42061 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 42062 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 42063 Clinical - Medical Laboratory 4.8-57.6 Credits
MLAB 42064 Practicum (or Field Experience) 11.2-64 Credits
MLAB 42065 Practicum (or Field Experience) 11.2-64 Credits
MLAB 42066 Practicum (or Field Experience) 11.2-64 Credits
MLAB 42067 Practicum (or Field Experience) 11.2-64 Credits
MLAB 42068 Practicum (or Field Experience) 11.2-64 Credits
MLAB 42069 Practicum (or Field Experience) 11.2-64 Credits
MENTAL HEALTH SERVICES (CMSW)

CMSW 1341 Behavior Modification with Cognitive Disorder 3 Credits (3 Lec, 0 Lab)
This is an in-depth study of the theories and principles of behavioral science and the methods of modifying and controlling behavior in clients with cognitive disorders.
Course Type: Technical
MENTAL HEALTH SERVICES
(DAAC)

DAAC 1264 Practicum - Substance Abuse/Addiction Counseling (Prevention) 2 Credits (0 Lec, 14 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Course Type: Technical

DAAC 1304 Pharmacology of Addiction 3 Credits (3 Lec, 0 Lab)
This course emphasizes pharmacological effects of addiction, tolerance, dependence, cross addiction, drug interaction, withdrawal, and recovery. Describes the psychological and physiological effects of substance use and behaviors.
Course Type: Technical

DAAC 1311 Counseling Theories 3 Credits (3 Lec, 0 Lab)
This is an examination of the major theories and current treatment modalities used in the field of counseling.
Course Type: Technical

DAAC 1317 Basic Counseling Skills 3 Credits (3 Lec, 0 Lab)
This course is an overview and application of the basic counseling skills.
Course Type: Technical

DAAC 1319 Substance-Related and Addictive Disorders 3 Credits (3 Lec, 0 Lab)
This course is an overview of causes and consequences of substance-related and addictive disorders, the major drug classifications, and the counselor’s code of ethics.
Course Type: Technical

DAAC 2306 Substance Abuse Prevention I 3 Credits (3 Lec, 0 Lab)
This course is an examination of substance use disorder prevention.
Course Type: Technical

DAAC 2307 Addicted Family Intervention 3 Credits (3 Lec, 0 Lab)
This is an examination of family systems focusing on the effects of addiction and recovery.
Course Type: Technical

DAAC 2341 Counseling Alcohol and Other Drug Addictions 3 Credits (3 Lec, 0 Lab)
This is an advanced examination of skills, confidentiality, and ethical guidelines applied in the counseling, treatment, and recovery of substance use disorders.
Course Type: Technical

DAAC 2353 Substance Abuse Prevention II 3 Credits (3 Lec, 0 Lab)
This course is an in-depth exploration of research, evaluation methods and best practices in prevention program design.
Course Type: Technical
MENTAL HEALTH SERVICES (PMHS)

PMHS 2366  Practicum-Mental Health Services Technician  3 Credits  (0 Lec, 21 Lab)
This course is a practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisite(s): must complete 28 hours in the program before the practicum
Course Type: Technical

PMHS 55000  Certified Anger Management Instructor/Facilitator  1.6 Credits
As a group leader and instructor, this course will provide you with a framework for anger management group instruction, as well as some insight into aggression and frustration theory and the fight or flight concepts of human behavior. The goal of the anger instructor two-day program is to certify therapists, counselors, social workers, group facilitators, and training managers and others who provide helping services to anger addicts. Note: Textbook required; additional print resources; online resources; other suggested materials

PMHS 55001  Certified Domestic Violence Facilitator  1.6 Credits
As a group leader, this course will provide you with a framework for domestic violence and battering intervention group instruction. Interactive lessons and exercises cover important topics such as respect and accountability, maintaining positive relationships, good communication, parenting, and the role of religion in recovery. This course will count towards and give new instructors the needed amount of BIPP battering intervention training as well as count towards the continuing education requirement for current instructors. Note: Textbook required; additional print resources; online resources; other suggested materials

PMHS 55002  Current Trends and Ethics in Substance Abuse Treatment  1.6 Credits
This Continuing Education training focuses on the current trends and evidence-based treatments that are being implemented in the behavioral health and substance abuse counseling field. The course will also focus on and include three hours of ethics training to meet part of the DSHS, CEU requirements for LCDCs, LPCs, and LCSWs. Note: Materials provided; online resources available.
MENTAL HEALTH SERVICES
(PSYT)

PSYT 1371  Mental Health Legal and Ethical Issues  3 Credits  (3 Lec, 0 Lab)
This course covers concepts of confidentiality, ethics, mental health legislation, regulations relating to the maintenance and use of mental health and substance abuse information and mental records.
Course Type: Technical

PSYT 1372  Basic Nursing Skills for Psychiatric Technicians  3 Credits  (3 Lec, 0 Lab)
This course is a mastery of entry level nursing skills and competencies for a variety of health care settings. It Utilizes the nursing process as the foundation for all nursing interventions with specific focus on mental health/psychiatric facilities.
Course Type: Technical

PSYT 1471  Basic Nursing Skills for Mental Health/Psychiatric Technicians  4 Credits  (2 Lec, 4 Lab)
This course is a mastery of entry level nursing skills and competencies for a variety of health care settings. It utilizes the nursing process as the foundation for all nursing interventions specific to mental health/psychiatric facilities.
Prerequisite(s): Reading level 6 and Writing level 6
Course Type: Technical

PSYT 2301  Psychology of Group Dynamics  3 Credits  (3 Lec, 0 Lab)
This course is an exploration of group counseling skills, techniques, stages of group development, and confidentiality and ethics.
Prerequisite(s): PSYC 2301
Course Type: Technical

PSYT 2331  Abnormal Psychology  3 Credits  (3 Lec, 0 Lab)
This is an examination and assessment of the symptoms, etiology, and treatment procedures of mental, emotional and behavioral disorders.
Course Type: Technical

PSYT 55000  Anatomy & Physiology for Emergency Care  6.4 Credits
Prerequisite(s): None. An introduction into normal anatomy and physiology of the human body. This course applies emphasis, clinical correlation and application to emergency care. A introduction to the pathophysiology of common injuries and illnesses found in the emergency care setting is included. (EMSP 1371). Note: Textbook required.
MENTAL HEALTH SERVICES (SCWK)

SCWK 1313  Introduction to Social Work  3 Credits  (3 Lec, 0 Lab)
This course is an overview of the social work profession and introduction
 to the terms, concepts, people, and critical events that have shaped the
 profession.
Course Type: Technical

SCWK 2301  Assessment and Case Management  3 Credits
This is a study of the exploration of procedures to identify and evaluate
 an individual’s and/or family’s strengths, weaknesses, problems, and
 needs in order to develop an effective plan of action. Topics include oral
 and written communications essential for screening, assessment, and
 case management to determine the need for prevention, intervention,
 and/or referral. (3:3-0).
Course Type: Technical
MENTAL HEALTH SERVICES (SOCW)

SOCW 2361 Introduction to Social Work  3 Credits  (3 Lec, 0 Lab)
This is a study of the development of the philosophy and practice of social work in the United States, survey of the fields and techniques of social work, practice, ethics, and values, roles and responsibilities and various field of social work practice. This course also includes a 40-hour integrated agency-related volunteer experience.
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Academic
HLAB 1401  Introduction to Histotechnology  4 Credits  (3 Lec, 2 Lab)
This course provides an introduction to the healthcare environment and the histology laboratory. This includes laboratory safety and infection control; healthcare professionals; medical terminology; basic anatomy and physiology; laboratory mathematics; communication; and ethics, legal, and professional issues. Prerequisite(s): Acceptance into the Microscopic Tissue Anatomy Program
Course Type: Technical

HLAB 1402  Histotechnology I  4 Credits  (3 Lec, 3 Lab)
This course is an introduction to the basic theories and practices of histotechnology. This includes laboratory safety, fixation, tissue processing, embedding, microtomy and cryotomy, and routine staining. Prerequisite: HLAB1401
Course Type: Technical

HLAB 1405  Functional Histology I  4 Credits  (3 Lec, 3 Lab)
This course provides recognition, composition, and function of cells, cell life cycles, blood, and basic tissue types. Prequisite: HLAB 1402
Course Type: Technical

HLAB 1443  Histotechnology II  4 Credits  (3 Lec, 3 Lab)
This course provides a continuation of Histotechnology I. It introduces both theory and practice of common histochemical staining techniques. Topics include laboratory safety; laboratory mathematics and reagent preparation; basic tissue/dye bonding; differentiation and quality control; and nuclear, connective tissue, and carbohydrate staining techniques. Prerequisite(s): HLAB1460
Course Type: Technical

HLAB 1446  Functional Histology II  4 Credits  (3 Lec, 3 Lab)
This course is a continuation of Functional Histology I with emphasis on the recognition, composition, and function of organ systems. It includes skeletal tissues, central nervous system, circulatory system, endocrine glands, and reproductive system.
Course Type: Technical

HLAB 1460  Clinical I - Histologic Technology/Histotechnologist  4 Credits  (0 Lec, 16 Lab)
This course provides the student with a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite(s): HLAB 1405
Course Type: Technical

HLAB 1461  Clinical II - Histologic Technology/Histotechnologist  4 Credits  (0 Lec, 20 Lab)
This course provides a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite(s): HLAB 1446
Course Type: Technical
MILITARY SCI-AIR FORCE (AFSC)

AFSC 1201 Foundations of United States Air Force I 2 Credits (1 Lec, 2 Lab)
This course introduces the concept of war and the role the Air Force plays. Students will learn about the career opportunities available, benefits afforded an Air Force member, and develop productive life skills. Basic oral and written communication skills will be demonstrated. Course focus is on developing basic knowledge and comprehension of Air Force leadership dimensions, while gaining a big picture understanding of ROTC course, its purpose in the Air Force and its advantages for the student.
Course Type: Academic

AFSC 1202 Foundations of United States Air Force II 2 Credits (1 Lec, 2 Lab)
This course explores the basic verbal and written communication skills and an operational understanding of the Air Force core values. Students will learn the importance of managing diversity and the concepts and consequences of harassment. The basic concepts of Air Force leadership, as well as, the concept of effective team building will be developed. Case studies will provide a tangible context for learning the Soldier's Creed and Warrior Ethos as they apply in the contemporary operating environment.
Course Type: Academic

AFSC 2201 The Evolution of USAF Air and Space Power I 2 Credits (1 Lec, 2 Lab)
This course covers key historical events and milestones in the development of air power as a primary instrument of United States national security. Students will learn core values and competencies of leaders in the United States Air Force and tenets of leadership and ethics.
Course Type: Academic

AFSC 2202 The Evolution of USAF Air and Space Power II 2 Credits (1 Lec, 2 Lab)
The course overviews the key terms and definitions used to describe air and space power. Students will know the milestone and historical events, leaders, and technological advancements which surround the evolution and employment of USAF air and space power. Basic verbal and written communication skills along with an operational understanding of Air Force Core Values and ethics will be demonstrated.
Course Type: Academic
MILITARY SCIENCE (MSCI)

MSCI 1125 Physical Readiness Training 1 Credit (0 Lec, 1 Lab)
This is a physical conditioning class designed to promote high levels of performance on the Army Physical Fitness Test (APFT), and to improve the health, endurance, and strength of the body. This course satisfies the physical education requirement and may be repeated. This course prepares each cadet for the APFT consisting of 2 minutes of push-ups, 2 minutes of sit-ups, as well as the two mile run. This class, given by the Military Science Department, uses Army techniques and guidelines during each session.
Course Type: Academic

MSCI 1126 Physical Readiness Training 1 Credit (0 Lec, 1 Lab)
This is a physical conditioning class designed to promote high levels of performance on the Army Physical Fitness Test (APFT), and to improve the health, endurance, and strength of the body. This course satisfies the physical education requirement and may be repeated. This course prepares each cadet for the APFT consisting of 2 minutes of push-ups, 2 minutes of sit-ups, as well as the two mile run. This class, given by the Military Science Department, uses Army techniques and guidelines during each session.
Course Type: Academic

MSCI 1131 Advanced Physical Fitness Course 1 Credit (0 Lec, 1 Lab)
This is a senior level ROTC physical conditioning class designed to promote high levels of performance on the Army Physical Fitness Test (APFT), and to improve the health, endurance, and strength of the body. Emphasis is placed on implementations of the Army's physical fitness program through lecture and practical exercise. Students will also become familiar with Army height, weight, and body fat standards. Participate in three assessment sessions to track individual improvement and participate as leaders in the conduct of the physical training session in the vicinity of SJCD area. Prerequisite or Co-requisite(s): MSCI 1125
Course Type: Academic

MSCI 1210 Introduction to ROTC 2 Credits (1 Lec, 2 Lab)
This course explores the dimensions of creative and innovative leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced planning, executing and assessing team exercises. While participation in the leadership labs is not mandatory during the MSL II year, significant experience can be gained in a multitude of areas and participation in the labs is highly encouraged. The focus continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation and squad tactics. Case studies will provide a tangible context for learning the Soldier’s Creed and Warrior Ethos as they apply in the contemporary operating environment.
Course Type: Academic

MSCI 1211 Foundations of Tactical Leadership 2 Credits (1 Lec, 2 Lab)
This course examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). This course highlights dimensions of terrain analysis, patrolling, and operation orders. Continued study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. This course provides a smooth transition into MSL 301. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios.
Course Type: Academic

MSCI 1220 Introduction to Leadership 2 Credits (1 Lec, 2 Lab)
This course introduces you to the personal challenges and competencies that are critical for effective leadership. You will learn how the personal development of life skills such as goal setting, time management, physical fitness, and stress management relate to leadership, officership, and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions, attributes and core leader competencies while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student.
Course Type: Academic

MSCI 1221 Introduction to Tactical Leadership 2 Credits (1 Lec, 2 Lab)
This course overviews leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. You will explore dimensions of leadership values, attributes, skills, and actions in the context of practical, hands-on, and interactive exercises.
Course Type: Academic

MSCI 2210 Military Leadership Development Cr. 2 2 Credits (2 Lec, 2 Lab)
This course focuses on characteristics of leadership, problem analysis, decision making, oral presentations, first aid, small unit tactics, land navigation, basic radio communication, marksmanship, fitness training, and rappelling. Fitness training required two times per week in addition to class and lab.
Course Type: Academic

MSCI 2220 Military Leadership Development Cr. 2 2 Credits (2 Lec, 2 Lab)
This course focuses on characteristics of leadership, problem analysis, decision making, oral presentations, first aid, small unit tactics, land navigation, basic radio communication, marksmanship, fitness training, and rappelling. Fitness training required two times per week in addition to class and lab.
Course Type: Academic

MSCI 2810 Basic Camp Cr. 8 8 Credits (0 Lec, 8 Lab)
No military obligation is associated with this course. Student will not receive credit for both basic course work and Basic Camp. Six week off-campus field training practicum. Introduces students to the Army and leadership.
Prerequisite(s): Approval of the department chairman.
Course Type: Academic
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MUAP 1183 Private Lessons 1 Credit
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MUAP 1184 Private Lessons 1 Credit
Course Type: Academic

MUAP 1186 Music Composition I 1 Credit
This course covers techniques of composition and arranging for various combinations of instruments and voices in differing musical procedures such as tonality, modality, atonality, serialism, pandiatonicism, etc. Prerequisite(s): MUSI 1301 or 1211. It may be repeated for no credit. Students must have department chair approval to enroll. (1:0.5-0)
Course Type: Academic

MUAP 1187 Music Composition 1 Credit
This is a continuation of MUAP 1186 or 1286. Prerequisite(s): MUAP 1186 or 1286, or consent of the department chair. It may be repeated for no credit. (1:0.5-0)
Course Type: Academic

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Course Type: Academic

MUAP 1202 Private Lessons 2 Credits
Course Type: Academic

MUAP 1203 Private Lessons 2 Credits
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MUAP 2265  Private Lessons  2 Credits
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MUAP 2266  Private Lessons  2 Credits
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MUAP 2267  Private Lessons  2 Credits
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MUAP 2268  Private Lessons  2 Credits
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MUAP 2269  Private Lessons  2 Credits
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MUAP 2270  Private Lessons  2 Credits
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MUAP 2271  Private Lessons  2 Credits
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MUAP 2272  Private Lessons  2 Credits
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MUAP 2281  Private Lessons  2 Credits
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MUAP 2282  Private Lessons  2 Credits
Course Type: Academic

MUAP 2283  Private Lessons  2 Credits
Course Type: Academic

MUAP 2284  Private Lessons  2 Credits
Course Type: Academic

MUAP 2286  Composition  2 Credits  (1 Lec, 0 Lab)
This is the third semester of compositional studies in the sequence.
Prerequisite(s): MUAP 1187 or 1287, or consent of the department chair,
may be repeated for no credit.
Course Type: Academic

MUAP 29006  Private Wood/Sax Lessons (CMS)  0 Credits
Music (MUEN)

MUEN 1121 Instrumental Ensemble 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition and/or conference. Instruments may include all orchestra instruments. The instrumental ensemble meets three laboratory hours per week with special rehearsals called as needed. The course may be taken a maximum of six times for credit.
Course Type: Academic

MUEN 1122 Concert Band 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of the audition and/or conference. Performance literature represents many styles of music. Concert band meets three hours per week, with special rehearsals called as needed. This course may be repeated a maximum of six times for credit.
Course Type: Academic

MUEN 1124 Wind Ensemble 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of the audition and/or conference. Performance literature represents many styles of music, making Wind Ensemble interesting and enjoyable. The Wind Ensemble meets three hours per week, with special rehearsals called as needed. This course may be repeated a maximum of six times for credit.
Course Type: Academic

MUEN 1125 Jazz Ensemble 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition and/or conference. Instruments in the Jazz Ensemble include trumpets, trombones, saxophones, clarinets, flutes, piano, bass, guitar and drums. Performance literature represents many styles of music; big band jazz, swing, Latin jazz, and jazz/rock. The Jazz Ensemble meets three hours per week with special rehearsals as needed. This course may be repeated a maximum of six times for credit.
Course Type: Academic

MUEN 1131 Small Instrumental Ensemble 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition and/or conference. Instruments in the small instrumental ensemble may vary from semester to semester. The small instrumental ensemble meets three laboratory hours per week with special rehearsals called as needed. This course may be repeated a maximum of six times for credit.
Course Type: Academic

MUEN 1141 College Choir 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition and/or conference. The College choir performs many styles of sacred and secular literature. This course may be repeated a maximum of six times for credit.
Course Type: Academic

MUEN 1143 Concert Choir 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition. This group has a limited membership which performs serious and entertaining music throughout the semester. This course may be taken a maximum of six times for credit.
Course Type: Academic

MUEN 1154 Small Vocal Ensemble 1 Credit (0 Lec, 3 Lab)
Membership is open to all students on the basis of audition and/or conference. This group has a limited membership which performs serious and entertaining music throughout the semester. Compositions performed may include for madrigals, duets, trios, quartets, sextets, or other small vocal ensembles. Students enrolled in this course are also expected to enroll in MUEN 1141 (College choir). This course may be repeated a maximum of six times for credit.
Course Type: Academic
MUSIC (MUSB)

MUSB 1305  Survey of Music Business  3 Credits  (3 Lec, 0 Lab)
This course includes an overview of the music industry including song writing, live performance, the record industry, music merchandising, contracts and licenses and career opportunities.  
Course Type: Technical
MUSIC (MUSC)

MUSC 1323 Audio Electronics Troubleshooting 3 Credits (2 Lec, 2 Lab)
This course covers basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting audio problems. Topics include soldering techniques, audio electronic alignment procedures for tape machines, console maintenance, and sound reinforcement equipment maintenance. Course Type: Technical

MUSC 1327 Audio Engineering I 3 Credits (2 Lec, 4 Lab)
This course provides an overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form and analysis, microphone concepts and miking techniques, studio setup and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and overview of mixing and editing. Course Type: Technical

MUSC 1331 Musical Instrument Digital Interface 3 Credits (2 Lec, 2 Lab)
This course provides an overview of Musical Instrument Digital Interface (MIDI) systems and applications. Topics include the history and evolution of MIDI, hardware requirements, computer numbering systems, channels and modes, the MIDI language and typical implementation of MIDI applications in the studio environment using software-based sequencing programs. Prerequisite(s): MUSI 1301, MUSI 1181

Course Type: Technical

MUSC 1405 Live Sound I 4 Credits (2 Lec, 4 Lab)
This course is an overview of the field of live sound. Includes principles of live sound and the theory an interconnection of the components of a sound reinforcement system. Course Type: Technical

MUSC 2101 Audio Engineering Practices 1 Credit (0 Lec, 3 Lab)
This course is a practical application of the concepts, techniques and procedures presented in Audio Engineering I and Audio Engineering II. The students will be divided into several working units comprised of 3-4 students per unit. Each group will be required to complete two recording projects during the semester. It may be repeated for credit up to three times if topics and learning outcomes vary. Prerequisite(s): MUSC 2427

Course Type: Technical

MUSC 2355 Musical Instrument Digital Interface II 3 Credits (2 Lec, 2 Lab)
This is a continuation of MIDI I with emphasis on advanced sequencer operation and SMPTE-based synchronization in the interaction of multiple recording and playback systems. Topics also include synthesis and its relation to software and hardware devices, sampling and sampling manipulation utilizing software sequencers, and sequencing for video. The student will perform advanced MIDI techniques, execute multimachine synchronization and demonstrate advanced use of software-based sequencing, synthesis and sampling devices. Prerequisite(s): MUSC 1331

Course Type: Technical

MUSC 2386 Internship-Recording Arts Technology/Technician 3 Credits (0 Lec, 18 Lab)
This is a practical, general training and experience in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning experiences vary. Prerequisite(s): MUSC 2447, MUSC 2355

Course Type: Technical

MUSC 2403 Live Sound II 4 Credits (2 Lec, 4 Lab)
This course provides an overview of stage monitor systems. Includes monitor system set-up, operation, and stage management. Also covers interactivity between sound management, performance quality and audience experience. Course Type: Technical

MUSC 2427 Audio Engineering II 4 Credits (3 Lec, 3 Lab)
This is a continuation of Audio Engineering I with emphasis on implementation of techniques and theories of the recording process. Topics include applications of microphones, the audio console, the multitrack tape recorder, and signal processing devices in the recording session environment. Prerequisite(s): MUSC 1327

Course Type: Technical

MUSC 2447 Audio Engineering III 4 Credits (3 Lec, 3 Lab)
This course covers presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk-based digital audio editing, nonlinear digital multitrack recording and advanced engineering projects. Prerequisite(s): MUSC 2427

Course Type: Technical

MUSC 55000 Audio Engineering I 6.4 Credits
Students learn about acoustic and electronics concepts and studio production procedures.
MUSIC (MUSI)

MUSI 1110 Perspective in Jazz 1 Credit (1 Lec, 0 Lab)
This course will discuss topics related to jazz with special emphasis on its development and contribution to American culture. It is structured for the student interested in jazz music.
Course Type: Academic

MUSI 1181 Class Piano I 1 Credit (1 Lec, 1 Lab)
This course is class instruction in the fundamentals of keyboard technique for beginning piano students.
Course Type: Academic

MUSI 1182 Class Piano II 1 Credit (1 Lec, 1 Lab)
This course covers advanced beginning class instruction in the fundamentals of keyboard technique.
Course Type: Academic

MUSI 1183 Voice Class 1 Credit (1 Lec, 1 Lab)
This course is class instruction in the fundamentals of singing including breathing, tone production, and diction. Designed for students with little or no previous voice training. Does not apply to a music major degree.
Course Type: Academic

MUSI 1188 Class Percussion 1 Credit (1 Lec, 1 Lab)
This course is class instruction in the fundamental techniques of playing percussion instruments.
Course Type: Academic

MUSI 1192 Guitar Class 1 Credit (1 Lec, 1 Lab)
This course is class instruction in the fundamental techniques of playing guitar.
Course Type: Academic

MUSI 1211 Theory of Music I 2 Credits (3 Lec, 0 Lab)
This is a study of the fundamentals of musicianship, including aspects of notation and part-writing.
Prerequisite(s): approval of the instructor and concurrent enrollment in appropriate ear training course and piano, unless waiver is granted by instructor.
Course Type: Academic

MUSI 1212 Theory of Music II 2 Credits (3 Lec, 0 Lab)
This is a continuation of MUSI 1211.
Prerequisite(s): MUSI 1211 or instructor approval and concurrent enrollment in ear training course and piano.
Course Type: Academic

MUSI 1216 Ear Training and Sight Singing I 2 Credits (3 Lec, 0 Lab)
This course provides basic aural, visual and vocal experience in the form of dictation and sight singing.
Prerequisite(s): approval of instructor and concurrent enrollment in appropriate theory course and piano.
Course Type: Academic

MUSI 1217 Ear Training and Sight Singing II 2 Credits (3 Lec, 0 Lab)
This is a continuation of MUSI 1216.
Prerequisite(s): MUSI 1216 or instructor approval and concurrent enrollment in theory course and piano.
Course Type: Academic

MUSI 1301 Music Fundamentals 3 Credits (3 Lec, 0 Lab)
This course is designed to familiarize students with the meaning of musical notation through the study of scales, chords and rhythm. It is especially adapted for students preparing to become teachers, and other students who wish to gain a broader knowledge of music.
Course Type: Academic

MUSI 1306 Music Appreciation 3 Credits (3 Lec, 0 Lab)
This course is an overview for understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.)
Course Type: Academic

MUSI 1307 Music Literature 3 Credits (3 Lec, 0 Lab)
This course provides a survey of the styles and forms of music as it developed from the middle ages to the present. This course will familiarize the student with cultural context, terminology, genres, and notation.
Prerequisite(s): Reading level 6
Course Type: Academic

MUSI 1310 American Music 3 Credits (3 Lec, 0 Lab)
This course covers a general survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music.
Course Type: Academic

MUSI 2181 Class Piano III 1 Credit (1 Lec, 1 Lab)
This course covers intermediate class instruction of keyboard technique.
Course Type: Academic

MUSI 2182 Class Piano IV 1 Credit (1 Lec, 1 Lab)
This course is an advanced class instruction of keyboard technique.
Course Type: Academic

MUSI 2187 Piano Laboratory 2 Credits (3 Lec, 0 Lab)
This course is an advanced laboratory course in keyboard technique.
Course Type: Academic

MUSI 2211 Theory of Music III 2 Credits (3 Lec, 0 Lab)
This is a continuation of the first-year theory course. It includes written and keyboard harmonic analysis.
Prerequisite(s): MUSI 1212 or approval of the instructor, and concurrent enrollment in ear training course and piano.
Course Type: Academic

MUSI 2212 Theory of Music IV 2 Credits (3 Lec, 0 Lab)
This is a continuation of MUSI 2211.
Prerequisite(s): MUSI 2211 and concurrent enrollment in ear training course and piano.
Course Type: Academic

MUSI 2216 Ear Training and Sight Singing III 2 Credits (3 Lec, 0 Lab)
This is a continuation of the first-year course in Ear Training and Sight Singing.
Prerequisite(s): MUSI 1217.
Co-requisite(s): concurrent enrollment in appropriate theory course and piano.
Course Type: Academic
MUSI 2217  Ear Training and Sight Singing IV  2 Credits  (3 Lec, 0 Lab)
This is a continuation of MUSI 2216.
Prerequisite(s): MUSI 2216,
Co-requisite(s): concurrent enrollment in appropriate theory course and piano.
Course Type: Academic

MUSI 29009  Small Instrumental Ensemble  0 Credits

MUSI 39011  Piano Lessons Private  0.4 Credits
NONDESTRUCTIVE TESTING (METL)

**METL 1313  Introduction to Corrosion  3 Credits  (2 Lec, 2 Lab)**
This course provides an introduction to internal, external, and atmospheric corrosion including terminology, causes of common corrosion problems in industry, and general remedies such as cathodic protection, protective coatings, material selection, and chemical treatments.

Course Type: Technical

**METL 55000  Introduction to Corrosion  6.4 Credits**
Prerequisite(s): None. Textbook Required. An introduction to internal, external, and atmospheric corrosion including terminology, causes of common corrosion problems in industry, and general remedies such as cathodic protection, protective coatings, material selection, and chemical treatments. (METL 1313)

**METL 55001  Welding Metallurgy I  9.6 Credits**
Prerequisite(s): None. Textbook Required. This is a study of metallurgy and its application related to welding including studies of metal characteristics, testing, effects of alloying and heat treating, and basic properties, with an emphasis on conducting tests and metallographic techniques. (METL 1405)

**METL 55002  Basic Metallurgy  4 Credits**
An introduction to physical metallurgy and its applications related to welding including studies of metal characteristics, testing, effects of alloying and heat treating and basic properties. Emphasis is on conducting tests and metallographic techniques.

**METL 55003  Welding Metallurgy II  9.6 Credits**
Prerequisite(s): METL 1405 or department chair approval. Textbook Required. This is an advanced course in the application of metallurgy principles to the processes and procedures pertaining to various metal compositions and fusions. Studies include the metallurgy and selection of filler metal groups, the nature of defects, metal fusion problems, thermal effects in metal fusion, and the welding of various kinds of steel and nonferrous materials. (METL 2435)

**METL 55004  Ultrasonic Crack Sizing  3.2 Credits**
This course is an overview of the ultrasonic techniques, equipment and performance requirements for the detection, characterization and sizing of surface-breaking cracks in metallic engineering materials. Various ultrasonic angle beam techniques are explained, demonstrated and practiced to specific technician learning outcomes.
NONDESTRUCTIVE TESTING (NDTE)

NDTE 1301 Film Interpretation of Weldments 3 Credits (2 Lec, 2 Lab)
This is the study of radiographic film, including exploration of radiographic basics, interpretation, and causes and effects of discontinuities.
Course Type: Technical

NDTE 1405 Introduction to Ultrasonics: Level 1 & 2 4 Credits (3 Lec, 3 Lab)
This course covers the basic theory and applications of the ultrasonic techniques of materials testing covering the theoretical material from the certification test for Ultrasonic Level I American Society of Non-Destructive Testing.
Course Type: Technical

NDTE 1410 Liquid Penetrant, Magnetic Particle and Visual Testing: Level 1 & 2 4 Credits (3 Lec, 3 Lab)
This course is a theoretical study and practical application of the non-destructive testing techniques of penetrant and magnetic particle testing required by quality assurance and test personnel.
Course Type: Technical

NDTE 1440 Eddy Current Testing 4 Credits (3 Lec, 3 Lab)
This course covers the general principles of Eddy Current Testing including theory, knowledge, and skills for basic examination; effects of material properties, probe types, calibration standards, and equipment selection.
Course Type: Technical

NDTE 1454 Intermediate Ultrasonics: Flaw Detection and Sizing 4 Credits (3 Lec, 3 Lab)
This course covers applications of the ultrasonic techniques of materials testing for flaw sizing and characterization.
Prerequisite(s): NDTE 1305 or NDTE 1405
Course Type: Technical

NDTE 2339 Pressure Piping Inspection 3 Credits (2 Lec, 2 Lab)
This course covers the general principles of pressure vessel inspection. It covers American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) documents pertaining to pressure vessel inspection requiring the principle portion in preparation for the API 570 certification examination.
Course Type: Technical

NDTE 2401 Advanced Ultrasonics: Phased Array and A.U.T. 4 Credits (3 Lec, 3 Lab)
Emphasis is placed on examination of components and characterization of flaws using advanced techniques.
Prerequisite(s): NDTE 1354 or NDTE 1454
Course Type: Technical

NDTE 2411 Preparation for Certified Welding Inspector Exam 4 Credits (3 Lec, 3 Lab)
This course covers welding fundamentals, welding inspection and code interpretation in preparation for the certified welding inspector examination.
Course Type: Technical

NDTE 2470 Pressure Vessel Inspection 4 Credits (3 Lec, 3 Lab)
This course in general principles of pressure vessel inspection covers American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) documents pertaining to pressure vessel inspection. Emphasis is on preparing students to take the API 510 certification exam.
Course Type: Technical

NDTE 41001 Film Interpretation of Weldmen 4.8-9.6 Credits
NDTE 41005 Introduction to Ultrasonic Tes 9.6-12.8 Credits
NDTE 41010 Liquid Penetrant/Magnetic Part 9.6-12.8 Credits
NDTE 41040 Eddy Current Testing 6.4-9.6 Credits
NDTE 41050 Radiography for Welders 6.4-9.6 Credits
NDTE 41054 Intermediate Ultrasonics 6.4-9.6 Credits
NDTE 42000 Prof. Development: Welding 0.7-2.4 Credits
NDTE 42001 Advanced Ultrasonic Testing 9.6-12.8 Credits
NDTE 42011 Preparation for Welding Inspec 4.8-16 Credits
NDTE 42039 Pressure Piping 4.8-12.8 Credits
NDTE 42040 Pressure Vessel Inspection 8-12.8 Credits
NDTE 55001 Intermediate Ultrasonics: Flaw Detection & Sizing 9.6 Credits
Prerequisite(s): NDTE 1405 Note: Textbook is required. This course covers applications of the ultrasonic techniques of materials testing for flaw sizing and characterization. (NDTE 1454)

NDTE 55002 Liquid Penetrant, Magnetic Particle and Visual Testing: Level 1 & 2 9.6 Credits
Prerequisite(s): None Note: Textbook is required. This course is a theoretical study and practical application of the non-destructive testing techniques of penetrant and magnetic particle testing required by quality assurance and test personnel. (NDTE 1410)

NDTE 55003 Preparation for Certified Welding Inspector Exam 9.6 Credits
Prerequisite(s): None. Note: Textbook is required. This course covers welding fundamentals, welding inspection and code interpretation and the principle portion in preparation for the certified welding inspector examination. (NDTE 2411)

NDTE 55004 Advanced Ultrasonics 9.6 Credits
Prerequisite(s): NDTE 1454 Emphasis is placed on examination of components and characterization of flaws using advanced techniques. (NDTE 2401)

NDTE 55005 Magnetic Particle Level I/II (MT) 2.4 Credits
The course is designed for manufacturers, services companies, and overhaul facilities, who require their personnel to be trained in Magnetic Particle Testing, used to locate inherent, processing or service discontinuities in ferrous materials. In addition to covering the theoretical aspects of this method, the course provides demonstrations and practical hands-on laboratory time on both portable and stationary equipment.
NDTE 55006 Liquid Penetrant Level I/II (PT) 1.6 Credits
This course is for manufacturers, service companies, military organizations, etc. whose personnel require classroom training for qualification and certification in Liquid Penetrant Testing, which is used to detect inherent, processing and service related discontinuities that are open to the surface in nonporous materials. In addition to covering the theoretical aspects of this method, the course provides demonstrations and practical hands-on laboratory using both portable and stationary equipment. The course satisfies the training hours needed for both Level I and II certification in accordance with SNT-TC-1A.

NDTE 55008 Certified Welding Inspector (CWI) 4.8 Credits
The course covers topics of welding inspection techniques, metal joining and cutting processes, weld geometry and welding symbols, documentation for inspection etc. Metal properties and destructive testing, welding metallurgy, discontinuities at weld and base metal, visual inspection and other NDT methods are included in the program. The course also covers actual hands on training of visual inspection with weld replicas employing various inspection tools and gauges. The code book clinic on API 1104 is also included in the course.

NDTE 55009 Certified Expediter Training 1 Credit
This course provides a means for expeditors to achieve a recognized level of proficiency in the profession through a specialized course of study in association with EMA (Expediting Management Association). This training program confirms the qualification of expeditors, which is unique in the industry, yet generic enough to apply to all firms and business lines. Certification requires successful completion of the EMA Training Program, which encompasses two separate modules: the EMA Basic Training Course A-98 and the EMA Advanced Training Course B-99, culminating in a final examination.

NDTE 55010 Visual Testing Level I/II (VT) 2.4 Credits
The course is designed for manufacturers, services companies, and overhaul facilities, who require their personnel to be trained in the application of Visual Testing techniques. As well as covering all the theoretical aspects of this method, the course includes processes of improving visual inspection reliability and the use of a variety of visual equipment. The course satisfies the training hours needed for both Level I and II certification in accordance with SNT-TC-1A.

NDTE 55011 Ultrasonic Thickness Testing/UTT 1.6 Credits
Although introductory, this program offers in-depth coverage of ultrasonic theory and instrument operation for accurate thickness gauging. Lab training stresses procedural testing and proper recording of test results using state-of-the-art thickness gauges with waveform and digital display. This course satisfies the training hours needed for limited certification in accordance with SNT-TC-1A.

NDTE 55012 Positive Materials Identification (PMI) 0.8 Credits
The course covers topics of classification for alloy metals by the ASME and ASTM. Commonly used alloy base metals and welding consumables in the petrochemical industry. Materials traceability and color coding. The course also covers hands on training with portable PMI instruments.

NDTE 55013 API: 510 Pressure Vessel Inspector-Test Preparation 8 Credits
This program will help industries continually improve and ensure safety through the use of owner/user or third party inspectors specialized in pressure equipment. The course thoroughly reviews API Publications such as API-510, API RP-572, API RP-576, and API IRE Chapter II. inspectors are certified to inspect refining and petrochemical pressure vessels in accordance with API Standard 510, Pressure Vessel Inspection Code Maintenance, Inspection, Rating, Repair and Alternation. The certification program promotes self-regulation and establishes a uniform national program that will assist state and local governments in pressure vessel regulations. Specific examination criteria simulating actual API test conditions will be utilized providing an effective study base.

NDTE 55014 API: 570 Process Piping Inspector-Test Preparation 4.8 Credits
This comprehensive course will prepare an inspector to successfully complete the API-570 Authorized Piping Inspector Certification Examination. API initiated the Piping Inspector Certification Program to provide a continued high level of safety through the use of inspectors specialized in process piping; the course thoroughly reviews API Standard 570, API RP 574, ASME Boiler and Pressure Vessel Code Sec. V & IX, ASME Code for Pressure Piping B16.5 and B31.3. The certification program promotes self-regulation and establishes a uniform program that will assist state and local governments in process piping regulations. Specific examination criteria simulating actual API test conditions will be utilized providing an effective study base.

NDTE 55015 Film Interpretation of Weldments 6.4 Credits
Prerequisite(s): None Note: Textbook is required. This is the study of radiographic film interpretation, including exploration of radiographic basics, interpretation of indications and causes of indications. Film indications are evaluated according to the structural, piping and pressure vessel codes. (NDTE 1301)

NDTE 55016 Pressure Vessel Inspection 12.8 Credits
Prerequisite(s): None Note: Textbook is required. This course covers general principles of pressure vessel inspection. It will also cover American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) documents that pertain to pressure vessel inspection; emphasis will be on preparing students to take the API 510 certification exam. (NDTE 2440)

NDTE 55017 Eddy Current Testing 9.6 Credits
Prerequisite(s): None Note: Textbook is required. This course covers the general principles of eddy current testing including theory, knowledge and skills for basic examination and the effects of material properties, probe types, calibration standards and equipment selection. (NDTE 1440)

NDTE 55018 ACFM: Alternating Current Field Measurement 4.8 Credits
This is a 48 hour level I course covering electromagnetic theory; ACFM detection identification of cracks; weld inspection by the ACFM techniques; sizing for length and depth; reporting; backing-up data.

NDTE 55019 Pressure Piping Inspection 6.4 Credits
Prerequisite(s): None. Textbook Required. This course covers the general principles of pressure vessel inspection. It covers American Society of Mechanical Engineers (ASME) and American Petroleum Institute (API) documents that pertain to pressure piping inspection. It prepares students to take the API 570 certification examination. (NDTE 2339)
NDTE 55020  MFL: Magnetic Flux Leakage  2.4 Credits

NDTE 55021  Ultrasonic Testing (UT I)  4 Credits
Covers the basic theory and applications of the ultrasonic techniques of materials testing covering the theoretical material from the certification test for Ultrasonic Level I American Society of Non-Destructive Testing.

NDTE 55022  Ultrasonic Testing (UT II)  4 Credits
Covers theory and applications of the ultrasonic techniques of materials testing covering the theoretical material from the certification test for Ultrasonic Level II American Society of Non-Destructive Testing.

NDTE 55023  Digital Radiography  4 Credits
Students will read and interpret film images in a general context (degree of penetration, shape recognition, light and dark regions); identify discontinuities; identify from film weldment types and configurations.

NDTE 55024  NDT Technician  13.6 Credits
This course provides the classroom training in preparation for NDT certification Surface Methods (Levels I&II), NDT Ultrasonic Testing (Levels I & II).

NDTE 55025  Introduction to Inspection Technologies  2.4 Credits
Students learn regulatory for plant safety and inspection technologies and identify codes, standards and practices the define acceptance and rejection criteria for equipment deficiencies.

NDTE 55026  Non-Destructive Testing Technician Essentials  16 Credits
The program provides classroom instruction in NDT methods in preparation for entry into the NDT career field and subsequent licensing.

NDTE 55027  NDT Comprehensive Introduction  7.2 Credits
This course is designed for incumbent workers and covers the Non-destructive testing methods and techniques including visual weld inspections, radiography, magnetic particle and liquid penetrant testing, ultrasonic flaw sizing and detection, and eddy current testing.

NDTE 55028  NDT Technician Essentials I  8 Credits
This course covers the principles of Non-Destructive Testing, terms, definition and covers surface testing and visual testing of welds and other assemblies.

NDTE 55029  NDT Technician Essentials II  12 Credits
This course covers ultrasonic testing methods of welded joints and other assemblies.

NDTE 55030  Ultrasonic Thickness Testing  4 Credits
Although introductory, this program offers in-depth coverage of ultrasonic theory and instrument operation for accurate thickness gauging. Lab training stresses procedural testing and proper recording of test results using state-of-the-art thickness gauges with waveform and digital display. This course satisfies the training hours needed for limited certification in accordance with SNT-TC-1A.

NDTE 55031  Introduction to Ultrasonics 1 & 2  9.6 Credits
Prerequisite(s): None Note: Textbook is required. The course covers the basic theory and applications of the ultrasonic techniques of materials testing covering the theoretical material from the certification test for Ultrasonic Level 1 American Society of Non-Destructive Testing. (NDTE 1405)

NDTE 55032  Inspection/NDT Survey  0.8 Credits
Survey course over current NDT inspection techniques.
NONDESTRUCTIVE TESTING (QCTC)

QCTC 1341  Statistical Process Control  3 Credits  (2 Lec, 2 Lab)
This course focuses on components of statistics including techniques of collection, presentation, analysis, and interpretation of numerical data as applied to statistical control. It stresses application of correlation methods, analysis of variance, dispersion, sampling, quality control, reliability, mathematical models, and programming.
Prerequisite(s): Math level 9; and QCTC 1343 or PTAC 2314 or upon approval with previous Quality Theory experience.
Course Type: Technical

QCTC 1343  Quality Assurance  3 Credits  (2 Lec, 2 Lab)
This course provides information on principles and applications designed to introduce quality assurance.
Course Type: Technical

QCTC 1446  Testing and Inspection Systems  4 Credits  (3 Lec, 3 Lab)
This is a study of testing and inspection systems including pertinent specifications, inspection tools, gauges, instruments, and mechanisms used in illustrating the need for maintaining quality to established standards.
Course Type: Technical

QCTC 1448  Metrology and Prints  4 Credits  (3 Lec, 3 Lab)
This is the study of the terminology, methodology, and practice of measurement systems and equipment in the calibration and use of basic measuring tools.
Course Type: Technical

QCTC 2331  Standards and Codes  3 Credits  (2 Lec, 2 Lab)
This is a study of philosophy and theory of appropriate standards, organizations, and systems integration relating to the standards criteria in society.
Course Type: Technical

QCTC 41001  Total Quality Management  4.8-12.8 Credits
QCTC 41002  Teams and Consensus Building  0.7-0.7 Credits
QCTC 41003  Quality Control  4.8-12.8 Credits
QCTC 41005  Teaming  4.8-6.4 Credits
QCTC 41007  Coordinate Measuring Machine  3.2-11.2 Credits
QCTC 41041  Statistical Process Control  4.8-12.8 Credits
QCTC 41043  Quality Assurance  4.8-12.8 Credits
QCTC 41046  Testing and Inspection Systems  6.4-17.6 Credits
QCTC 41048  Metrology  6.4-6.4 Credits
QCTC 41091  Special Topics in Quality Cont  0.7-11.2 Credits
QCTC 42031  Standards  4.8-12.8 Credits
QCTC 42033  Statistical Process Control  1.6-4.8 Credits
QCTC 55000  Quality Assurance  6.4 Credits
Prerequisite(s): None
Note: Textbook is required. Information on quality assurance principles and applications; designed to introduce the student to the quality assurance profession. (QCTC 1343)

QCTC 55001  Six Sigma Overview  0.8 Credits
While traditional process improvement methods depend upon measuring outputs and establishing control plans to shield customers from organizational defects, a Six Sigma program demands that problems be addressed at the input root cause level, thereby eliminating the need for unnecessary inspection and rework processes.

QCTC 55002  RABQSA-Certified ISO 9001:2008 Lead Auditor Training  4 Credits
Learn the concepts of ISO 9001:2000 and how the standard can become a valuable part of your business management system. The course highlights the importance of the process approach and how it impacts not only your organization but also your auditing practices. The course is certified by RABQSA and meets the training portion of the requirements for certification of individual QMS Auditors.

QCTC 55003  Failure Mode Effect Analysis HEALTHCARE  0.8 Credits
Obtain skills to understand and use FMEAs for Healthcare and the concept of risk reduction and defect prevention. This course introduces concepts for Healthcare by identification of "things gone wrong" followed by activities designed to reduce risk. This course will help you successfully develop and maintain design and process Healthcare FMEAs for your company, which will include identifying and reducing risk factors.

QCTC 55004  Intro to MiniTab  1.6 Credits
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

QCTC 55005  Basic Statistical Process Control  0.8 Credits
Roll up your sleeves for hands-on practice with a variety of SPC tools, such as Pareto Analysis, process capability indexes, distributions, and control chart for variables and attributes. Understand how SPC integrates into the total quality system. You will benefit by receiving a better understanding of statistical process capability.

QCTC 55006  Failure Mode Effect Analysis  0.8 Credits
Obtain skills to understand and use FMEAs and the concept of risk reduction and defect prevention. This course introduces these concepts by identification of "things gone wrong" followed by activities designed to reduce risk. This course will help you successfully develop and maintain, design and process FMEAs for your company, which will include identifying and reducing risk factors.

QCTC 55007  Internal Auditor Course ISO 9001:2000  2.4 Credits
Internal Auditors are key tools for management to determine how effective their management systems are functioning. The sharer an auditor's skills are the sharper the tool in the hands of management. This course is designed to sharpen the skills of your internal auditors through daily practical application in live audit scenarios. Process auditing methods and techniques are used in role-play activities that include everything from writing a checklist, performing the audit, issuing corrective action requests and conducting closing meetings.

QCTC 55008  Quality System Documentation  1.6 Credits
Learn to document an ISO 9001:2000 system effectively. You will leave with "real" work accomplished - real documentation for your company. Through group activities and individual participation you will understand what documentation is needed and how to write it concisely. Most of all you will learn how to complete it efficiently and how it will benefit you and your company.
QCTC 55009 ISO 9001:2000 Hospital Management Overview 0.8 Credits
This course is designed for Hospital Governing Boards, Top Management, Department Managers, New Employees and others who are new to quality management systems or for those who need to sharpen their skills in their current established systems. With our value-added approach to the standards, you will learn how a good quality management system is meant to work with a business’s existing systems to improve upon a hospital's current business system. These classes are full of tips and suggestions from those considered to be the industry leaders.

QCTC 55010 Lean 101: Lean Overview 0.8 Credits
This seminar gives a high level view of the history, tools, and methodology of Lean that can be implemented into any business process. Participants will be exposed to Lean Principles that have impacted the business community with major improvements for decades. This course can lay a firm foundation for practical application and continued in-depth study.

QCTC 55011 Lean Office Introduction 0.7 Credits
This course involves a mix of classroom style learning with an interactive live simulation where class participants take on the roles of managers and workers within a company. During the class time participants learn lean definitions and techniques and throughout the day, participants explore the application of lean techniques in the simulated office.

QCTC 55012 Internal Quality Auditor Training 3.2 Credits
You will learn the concepts of ISO 9001:2000 and how the standard can become a valuable part of your business management system. You will engage in activities that create an understanding of each standard element and the benefits of each element for your organization. In this class you will acquire the skills to conduct successful internal quality systems audits for ISO 9001:2000. The course makes extensive use of activities and case studies to help participants fully understand the requirements of auditing to the ISO 9001:2000 standard.

QCTC 55013 How to Transition to ISO/TS 16949:2002 1.6 Credits
This course provides internal auditors with an understanding of the technical specification requirements so that they can be key support personnel during the transition to ISO/TS 16949:2002 from QS-9000 or ISO/TS 16949 1st Edition.

QCTC 55014 Testing and Inspection Systems 9.6 Credits
Prerequisite(s): None. Note: Textbook is required. This is a study of testing and inspection systems including pertinent specifications, inspection tools, gauges, instruments and mechanisms in illustrating the need for maintaining quality to establish standards. It covers the applications and methods of solving quality control and inspection problems using the appropriate testing and inspection methods such as AET, ET, LT, MT, PT, RT, UT and VT. (QCTC 1446)

QCTC 55015 Standards and Codes 6.4 Credits
Prerequisite(s): None. Note: Textbook is required. This is a study of philosophy and theory of standards, appropriate standard organizations and systems, and integration to the application of standards criteria in society. (QCTC 2331)

QCTC 55016 How to Transition from QS-9000 or ISO/TS 16949 to ISO/TS 16949:2002 2.4 Credits
For organizations transitioning from QS-9000 or ISO/TS 16949 First Edition to ISO/TS 16949:2002, this three-day course is designed to provide participants with a basic understanding of ISO/TS 16949:2002. Through individual participation and group activities, participants will gain a solid understanding of the ISO/TS 16949:2002's background, intent, and requirements. Each participant completes a gap analysis to indicate the present system's status in relationship to a compliant ISO/TS 16949:2002 quality management system. Present system status provides the foundation for a focused application of required steps to implement ISO/TS 16949:2002. These steps include: core process identification, sub-process identification, management process identification, sequence, interaction and measurement. Several tools and “take-aways” are provided to assist in the implementation process. Note: Not recommended or intended for ISO 9001/9002 transitions to ISO/TS 16949:2002.

QCTC 55017 Core Tools Overview 0.8 Credits
Provides participants with an introductory overview of APQP/PPAP, FMEA, SPC and MSA methodologies.

QCTC 55018 ISO/TS 16949:2002 Overview 0.8 Credits

QCTC 55019 Overview to Understand ISO/TS 2.4 Credits
For executives, managers and other employees needing conceptual knowledge of ISO/TS 16949:2002 as well as new to understanding automotive requirements.

QCTC 55020 ISO/TS Understanding 1.6 Credits
For all employees new to automotive requirements.

QCTC 55021 Automotive Core Tools 4 Credits
Learn the requirements of suppliers to DaimlerChrysler, Ford Motor Company and General Motors regarding product planning, control plans, Failure Mode and Effects Analysis (FMEA), Statistical Process Control (SPC), and Measurement Systems Analysis (MSA). Plexus automotive core tools courses were approved by the Supplier Quality Requirements Task Force (SQRTF) to meet the intent of QS-9000 including the planning tools specified by the requirement. So you can be confident that Plexus automotive core tools training provides precisely what you need to know to comply with the requirements - the same things your registrar auditors are learning - without wasting your time or money.

QCTC 55022 Implementing Measurement Systems Analysis 0.8 Credits
This one-day course develops the participants' understanding of the MSA Reference Manual through group activities and individual participation. In general, attendees will gain an understanding of the MSA Reference Manual and its impact on quality systems. Participants leave with an understanding of the elements of MSA and the relationship of MSA to a quality management system, and also gain insight into organizational applications, categories of measurement system variation, and Gage Repeatability and Reproducibility. MSA has direct application to QS-9000, ISO/TS 16949:2002, and the TE supplement.

QCTC 55023 Advanced Product Quality Planning 1.6 Credits
Learn the skills needed to implement the APQP process, develop Control Plans and complete the Production Part Approval Process smoothly and efficiently in your company. Acquire the skills to complete all APQP phases from “voice of the customer” through final output, including Control Plan Methodology and PPAP submission.
QCTC 55024 Fundamentals of ISO/TS 16949:2002 Internal Quality Auditing 3.2 Credits
This course is for newly selected internal auditors with no quality standards auditing experience. Through individual participation and group activities, participants will acquire the necessary skills to conduct successful internal quality system audits for ISO/TS 16949:2002. This course includes a simulated audit, based on documentation from an actual organization, so participants can develop and refine their newly acquired knowledge and skills. In addition this course focuses on the role of the automotive process approach and how the approach applies to specific implementation issues that arise during the training. Participants gain an understanding and practical insight through hands-on exercises that maximize their experience with the Technical Specifications.

QCTC 55025 Lean Six Sigma Overview Training 1.6 Credits
This course will provide an introduction to Six Sigma, how to implement it, why to implement it, fundamentals of lean manufacturing and how the Lean Six Sigma process works with organizational goals. Topics include: Prioritization matrix, FMEA, MSA, Critical path analysis, Replenishment pull systems, total productive maintenance, and value analysis.

QCTC 55026 Statistical Process Control 6.4 Credits
Prerequisite(s): Math level 7. Textbook Required. This course focuses on components of statistics including techniques of collection, presentation, analysis, and interpretation of numerical data as applied to statistical control. It stresses application of correlation methods, analysis of variance, dispersion, sampling quality control, reliability, mathematical models, and programming. (QCTC 1341)

QCTC 55027 NDT Advanced Technologies 4 Credits
QCTC 55028 Fundamentals of Internal Quality Auditing 1.6 Credits
Acquire the skills to conduct successful internal quality system audits for ISO 9001:2000. This course includes a fully simulated audit under the guidance of a Plexus Trainer so you can develop and refine your skills.

QCTC 55029 Understanding ISO: 9001-2008 1.6 Credits
Highlights include introduction to the ISO 9000 series, quality system philosophies, process approach, documentation and in-depth interpretation of ISO 9001:2000 requirements with application exercises. Participants should leave with a good understanding of the ISO 9001 standard and its application from both an auditor’s and implementer’s view.

QCTC 55030 Team Building 0.8 Credits
Basic principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, and the role of the individual in the team.

QCTC 55031 NDT Advanced-Infrared and Acoustic Thermography 0.8 Credits
This course is designed for manufacturers, service companies, and overhaul facilities who require their NDT technicians or engineers to have an understanding of the principles, applications and techniques used in Infrared and Acoustic Thermography.

QCTC 55032 NDT Advanced-Acoustic Emission Testing 0.8 Credits
This course is designed for manufacturers, service companies, and overhaul facilities who require their NDT technicians or engineers to have an understanding of the principles, applications and techniques used in Acoustic Emission Testing.

QCTC 55033 NDT Advanced-Guided Wave Ultrasonics/Acoustic Emission Testing 0.8 Credits
This course is designed for manufacturers, service companies, and overhaul facilities who require their NDT technicians or engineers to have an understanding of the principles, applications and techniques used in Guided Wave Ultrasonics/Acoustic Emission Testing.

QCTC 55034 NDT Advanced-Phased Array 0.8 Credits
This course is designed for manufacturers, service companies, and overhaul facilities who require their NDT technicians or engineers to have an understanding of the principles, applications and techniques used in Phased Array.

QCTC 55035 NDT Advanced-Digital Radiography 0.8 Credits
This course is designed for manufacturers, service companies, and overhaul facilities who require their NDT technicians or engineers to have an understanding of the principles, applications and techniques used in Digital Radiography.

QCTC 55036 Value Stream Mapping for the Office 0.7 Credits
Participants learn value stream mapping as a critical skill to eliminating waste in the existing process, how to develop a detailed, data-rich Value Stream Map in a hands-on manner, and helpful mapping hints. In addition, participants learn how to use the maps to create lean office processes.

QCTC 55037 AS9100 Internal Auditor Training 1.6 Credits
This course will provide you with a practical understanding of AS9100 (Aero Space 9100) by focusing on the process approach and how the process impacts auditing practices. Included in the course is a simulated audit to refine your newly acquired auditing knowledge and skills. Upon completion of the course, participants will leave with the skills and knowledge to properly conduct an internal audit of an AS9100 (Aero Space 9100) process-based quality management system.

QCTC 55038 ISO 9001:2008 Measurement, Data Analysis and Continual Improvement 1.6 Credits
Obtain practical experience in identifying appropriate measurement tools and analyzing the data they provide - all with the goal of improving customer satisfaction. The training course provides a review of ISO 9001:2000 Section 8 and an introduction to three levels of tools/techniques useful in measurement, data analysis and continual improvement: Elementary, Intermediate and Advanced. Gain insights into how measurement, data analysis, and continual improvement lead to process control, product conformity, and ultimately, customer satisfaction. Learn to confirm level of effectiveness and efficiency for measurement, data analysis, and continual improvement activities.

QCTC 55039 Understanding AS9100 1.6 Credits
Learn the requirements of AS9100 (Aero Space 9100) and the background and intent that affect how AS9100 (Aero Space 9100) is implemented. The understanding AS9100 (Aero Space 9100) course also focuses on the role of the process approach and how the process approach impacts specific implementation issues. You will be able to equip your organization to make appropriate and effective decisions with regard to AS9100 (Aero Space 9100) through this introductory course that identifies differences with your organization. The result for your organization will be an effective understanding and application of the standard.

QCTC 55040 MSSC Quality Practices & Measurement - FT 1.8 Credits
Students define quality, learn how quality is built into products and how to improve quality.
QCTC 55041 Metrology and Prints  9.6 Credits
Prerequisite(s): None. Textbook Required. This is the study of the terminology, methodology, and practice of measurement systems and equipment in the calibration and use of basic measuring tools. (QCTC 1448)

QCTC 55042 RABQSA-Certified ISO 9001:2008 Internal Auditor  2.3 Credits
This course provides either new or current internal auditors understanding of ISO 9001:2008 and a process approach methodology. Participants will acquire the necessary skills to become a leader in preparing and conducting audits through interactive methods and avoiding lecture based learning. A successful completion of Plexus International’s “RABQSA - Certified Internal Auditor Training” meets the training requirements for certification of individual QMS Internal Auditors.

QCTC 55043 Acoustic Emissions Testing Level 1  4 Credits
Students will study the principles and techniques related to Acoustic Emissions Testing by operating acoustic emission testing equipment and applying the correct inspection procedures.

QCTC 55044 Leadership Meeting Techniques  0.8 Credits
This course provides team leaders with the tools and skills to save time and resources by leading meetings that support business needs. Leaders learn how to plan, facilitate, and follow-up on meetings (including virtual meetings) to ensure there is a payoff for the time invested in meetings. This course also focuses leaders on the dynamics of group agreement and the importance of having everyone's commitment. Leaders learn seven techniques for making clear, high-quality decisions that have the buy-in and commitment of every group member.

QCTC 55045 Statistical Process Control Advanced  1.6 Credits
This workshop is a follow-up to our Basic SPC course. You will expand your fundamental understanding of Statistical Process Control by discovering new tools and methods taught in this course.

QCTC 55046 Statistical Process Control Basic  0.8 Credits
The purpose of this course is to provide practical instruction on the fundamental statistical tools and in modern process control methods. Course problems will be used to practice the techniques.

QCTC 55047 AS9100C Executive Briefing  1.6 Credits
Executive Understanding is a modular course that can be customized to fit an organization's needs. Intended for executives and upper level management to see the big picture of implementing the AS9100C standard, it's impacts, benefits and requirements. Available modules include: Executive Briefing, Describing the System, Factors for Successful Implementation, QMS Requirements Overview and Planning for Implementation.

QCTC 55048 AS9100C Understanding and Internal Auditor Training  2.4 Credits
Designed for both new and experienced auditors, participants will acquire the necessary skills to plan and perform 1st and 2nd party audits. Learn the ISO 19011 standard on audit guidelines, understanding of the standard, how to form an audit team, conduct an audit meeting, forming and organizing necessary documentation, and handling nonconformities. All training is done through the use of hands on activities, using case studies, group activities, and reducing lecture-based learning to increase knowledge retention. Essentially, learn by doing.

QCTC 55049 ISO 9001:2008 Certificate Program  6.4 Credits
Need ISO 9001 Training? ISO 9001:2008 Certificate Program delivers comprehensive insights and training for effective implementation. You'll have all the tools, knowledge and understanding to embark on a full compliance program and put your organization firmly on the path to continuous performance improvement.

QCTC 55050 ISO 9001:2008 Fundamentals of Internal Quality Auditor  1.6 Credits
Participants will learn the concepts of ISO 9001:2008 and how the standard can become a valuable part of the business management system. This course includes activities that create an understanding of each standard element and the benefits of each element for the organization. It provides the knowledge to conduct successful internal quality systems audits for ISO 9001:2008 by making extensive use of activities and case studies that help participants fully understand the requirements of auditing to the ISO 9001:2008 standard.

QCTC 55051 Overview to Non-Destructive Testing  4 Credits
This course reviews the general principles of seven non-destructive testing methods and their derivative techniques. The following class activities include lecture, demonstrations, and hands-on experience in an NDE lab environment.

QCTC 55052 Laboratory Safety Training  0.8 Credits
This course covers the use of specific equipment in a petrochemical lab and stresses the importance of using good safety practices.

QCTC 55053 Penetrant & Magnetic Particle Testing  4 Credits
A theoretical study and practical application of the non-destructive testing techniques of liquid penetrant and magnetic particle testing required by quality assurance and test personnel.

QCTC 55054 Ultrasonic Testing I  4 Credits
A comprehensive course for persons with little or no background in ultrasonic testing. Although introductory, this program offers in-depth coverage of ultrasonic theory and instrument operation.

QCTC 55055 Ultrasonic Testing II  4 Credits
An advanced, laboratory-intensive course for developing practical skills. The course is applications oriented and includes weld inspection, bond inspection, and immersion techniques.

QCTC 55056 Ultrasonic Thickness Testing I  1.6 Credits
Although introductory, this program offers in-depth coverage of ultrasonic theory and instrument operation for accurate thickness gauging. Lab training stresses procedural testing and proper recording of test results using state-of-the-art thickness gauges with waveform and digital display. This course satisfies the training hours needed for limited certification in accordance with SNT-TC-1A.

QCTC 55057 Digital Radiography  4 Credits
Students will read and interpret film images in a general context (degree of penetration, shape recognition, light and dark regions); identify discontinuities; identify from films weldment types and configurations.

QCTC 55058 Acoustic Emission Level II  4 Credits
This course covers the general principles of Acoustic Emission testing methods.

QCTC 55059 Intro to Non-Destructive Testing  4 Credits
This course covers the basic concepts and procedures related to Non-Destructive Testing.
QCTC 55060 Lean Six Sigma Yellow/Green Belt (Hybrid) 10.8 Credits
Six Sigma Yellow/Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMAIC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Yellow/Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Yellow/Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis.

QCTC 55061 Lean Six Sigma Black Belt 11.2 Credits
Six Sigma Black Belt training prepares participants to solve a wide variety of difficult problems across a wide spectrum of industries (transactional, service, manufacturing, healthcare) drawing on both quantitative and qualitative methods from the complementary domains of Lean and Six Sigma. A Lean Six Sigma Belt is a process facilitator, natural leader, and astute problem solver who is a data-driven, bottom-line, agent for achieving complex project breakthroughs and for powering organizational change.

QCTC 55062 Quality Management I (Hybrid) 10.4 Credits
Six Sigma Yellow/Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMAIC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Yellow/Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Yellow/Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis.

QCTC 55063 ST: Ultrasonic Flaw Detection and Characterization 4 Credits
Prerequisite(s): Students need a fundamental knowledge of ultrasonic angle beam techniques and are trained and certified to Ultrasonic Level II or equivalent. This course overviews the ultrasonic techniques, equipment and performance requirements for the detection, characterization surface breaking and embedded flaws metal engineering materials. Various ultrasonic angle beam techniques are explained, demonstrated and practiced to specific technician learning outcomes.

QCTC 55064 ST: Ultrasonic Flaw Sizing 4 Credits
Prerequisite(s): Students need a fundamental knowledge of ultrasonic angle beam techniques and are trained and certified to Ultrasonic Level II or equivalent. This course overviews the ultrasonic techniques, equipment and performance requirements for determining flaw length, depth and height measurements in metal engineering materials. Various ultrasonic angle beam techniques are explained, demonstrated and practiced to specific technician learning outcomes.

QCTC 55065 PM - Foundations Course 2.5 Credits
Critical path methods for planning and controlling projects, includes time/cost tradeoffs, resource utilization, subcontractor considerations, task determination, time management, scheduling management, status reports, budget management, customer service, professional attitude, and project supervision.

QCTC 55066 Metrology 9.6 Credits
Prerequisite(s): None This is the study of the terminology, methodology and practice of measurement systems and equipment in the calibration and use of basic measuring tools. (QCTC 1378)
NURSING / RN (RNSG)

RNSG 1105 Nursing Skills I 1 Credit
The course covers the study of the concepts and principles necessary to perform basic nursing skills for the adult patient; and demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills and professional values within a legal/ethical framework.
Prerequisite(s): Admission to the nursing program. (1:0-3).
Course Type: Technical

RNSG 1108 Dosage Calculations for Nursing 1 Credit (1 Lec, 0 Lab)
This course offers expanded training in the general principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes reading, interpreting, and solving dosage calculation problems utilizing various systems of measurement. It is a prerequisite for program admission.
Course Type: Technical

RNSG 1115 Health Assessment 1 Credit (0 Lec, 3 Lab)
This course covers development of skills and techniques required for a comprehensive nursing health assessment within a legal/ethical framework. Pre-requisite: Admission to the nursing program.
Course Type: Technical

RNSG 1144 Nursing Skills II 1 Credit (0 Lec, 4 Lab)
This is a study of the concepts and principles necessary to perform intermediate or advanced nursing skills for the adult patient; and demonstrate competence in the performance of nursing procedures. Content includes knowledge, judgment, skills and professional values within a legal/ethical framework.
Course Type: Technical

RNSG 1160 Clinical Nursing Introduction 1 Credit (0 Lec, 6 Lab)
This course is a health-related work-based experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This introductory level course helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Clinical education is an unpaid learning experience.
Course Type: Technical

RNSG 1215 Health Assessment 2 Credits (1 Lec, 2 Lab)
This course covers development of skills and techniques required for a comprehensive nursing health assessment within a legal/ethical framework.
Prerequisite(s): Admission to the nursing program.
Course Type: Technical

RNSG 1227 Transition to Professional Nursing 2 Credits (1 Lec, 2 Lab)
Content includes health promotion, expanded assessment, analysis of data, critical thinking skills and systematic problem solving process, pharmacology, interdisciplinary teamwork, communication, and applicable competencies in knowledge of systematic problem solving, critical thinking skills, and professional values within a legal/ethical framework throughout the lifespan. Pre-requisite: Admission to the ADN Transition Program.
Course Type: Technical

RNSG 1261 Clinical Nursing Common Concepts for Adult Health 2 Credits
This course is a health-related work-based experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This introductory level course helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Clinical education is an unpaid learning experience.
Co-requisite(s): RNSG 1341 (2:0-8).
Course Type: Technical

RNSG 1262 Clinical Nursing Complex Concepts 2 Credits (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This intermediate level course helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Clinical education is an unpaid learning experience.
Course Type: Technical

RNSG 1301 Pharmacology 3 Credits (3 Lec, 0 Lab)
This course is an introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of drug classifications. Content includes the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework.
Prerequisite(s): Department Chair Approval.
Course Type: Technical

RNSG 1341 Common Concepts of Adult Health 3 Credits (3 Lec, 0 Lab)
This course covers the basic integration of the role of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team and member of the profession. It includes the study of common concepts of caring for adult patients and families with medical-surgical health care needs related to body systems. Emphasis on knowledge, judgment, skills and professional values within a legal/ethical framework.
Co-requisite(s): RNSG 1261
Course Type: Technical

RNSG 1343 Complex Concepts of Adult Health 3 Credits (3 Lec, 0 Lab)
This course provides integration of previous knowledge and skills related to common adult health needs into the continued development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team and member of the profession in the care of adult patients and families with complex medical-surgical health care needs associated with body systems. Emphasis on complex knowledge, judgment, skills and professional values within a legal/ethical framework.
Course Type: Technical

San Jacinto College 2018-2019
RNSG 1413 Foundations for Nursing Practice  4 Credits  (2 Lec, 6 Lab)
This is an introduction to the role of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team and member of the profession. Content includes fundamental concepts of nursing practice, history of professional nursing, a systematic framework for decision making and critical thinking. The mechanisms of disease and the needs and problems that can arise are discussed and how the nursing process helps manage the patient through these issues. Emphasis on knowledge, judgment, skills, and professional values within a legal/ethical framework.
Prerequisite(s): Department chair approval.
Course Type: Technical

RNSG 2121 Professional Nursing: Leadership and Management  1 Credit  (1 Lec, 0 Lab)
This course features exploration of leadership and management principles applicable to the roles of the professional nurse. Includes application of knowledge, judgment, skills, and professional values within a legal/ethical framework.
Course Type: Technical

RNSG 2130 Professional Nursing Review and Licensure Preparation  1 Credit  (1 Lec, 0 Lab)
This course is a review of concepts required for licensure examination and entry into the practice of professional nursing. Includes review of application process of National Council Licensure Examination for Registered Nurses (NCLEX-RN) test plan, assessment of knowledge deficits, and remediation.
Course Type: Technical

RNSG 2160 Clinical: Nursing Management of Client Care  1 Credit  (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Practical experience is simultaneously related to theory. Direct Supervision is provided by the clinical professional.
Course Type: Technical

RNSG 2163 Clinical: Concepts of Advanced Nursing Practice and Management  1 Credit  (0 Lec, 6 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Co-requisite(s): RNSG 2271
Course Type: Technical

RNSG 2201 Care of Children and Families  2 Credits
This course is a study of concepts related to the provision of nursing care for children and their families, emphasizing judgment and professional values within a legal/ethical framework.
Co-requisite(s): RNSG 2262 (2:1-2).
Course Type: Technical

RNSG 2207 Adaptation to the Role of Nursing  2 Credits  (2 Lec, 1 Lab)
This is an introduction to selected concepts related to the role of the professional nurse as provider of care, coordinator of care and member of profession. Includes review of trends and issues impacting nursing and health care today and in the future. Content includes knowledge, judgment, skills and professional values within a legal/ethical framework. Introduction to selected medical-surgical topics is included.
Prerequisite(s): Department chair approval.
Course Type: Technical

RNSG 2208 Maternal Newborn Nursing and Women’s Health  2 Credits
This course covers concepts related to nursing care for childbearing families and women’s health issues. Content includes knowledge, judgment, skill and professional values within a legal/ethical framework. Co-requisite(s): RNSG 2260 (2:1-2).
Course Type: Technical

RNSG 2213 Mental Health Nursing  2 Credits
This course covers principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of patients and their families. This course enables the student to expand their understanding of human-environmental interactions and evolving mental health patterns within diverse cultures to promote optimal health. The student is provided with an opportunity to understand the organization of mental health patterns as they appear in normative growth and developmental perspectives as well as the alterations and the patterns with the resulting nursing implications. The progression will be from common to more complex mental health patterns as they relate to nursing practice.
Co-requisite(s): RNSG 2261 (2:1-2).
Course Type: Technical

RNSG 2231 Advanced Concepts of Adult Nursing  2 Credits  (2 Lec, 1 Lab)
This course covers the application of advanced concepts and skills for the development of professional nurse’s roles with adult patients and families involving multiple body systems. Emphasis on advanced knowledge, judgment, skills, and professional values within a legal/ethical framework.
Course Type: Technical

RNSG 2260 Clinical Registered Nursing  2 Credits
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This intermediate health professional work-based instruction helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the work flow in the care of adult clients/families with complex health needs involving multiple body systems in intermediate and critical care settings. Practical experience is simultaneously related to theory.
Clinical education is an unpaid learning experience.
Co-requisite(s): RNSG 2208 (2:0-8).
Course Type: Technical
RNSG 2261 Clinical Mental Health Nursing 2 Credits
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This intermediate level course helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the work flow in mental health nursing. It provides applications of concepts of mental health, psychopathology, and treatment modalities related to nursing care of clients and their families. Practical experience is simultaneously related to theory. Clinical education is an unpaid learning experience.
Co-requisite(s): RNSG 2213 (2.0-8).

Course Type: Technical

RNSG 2262 Clinical Nursing Care of Children and Families 2 Credits
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This intermediate health professional work-based instruction helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the work flow in the provision of nursing care for the child and family. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by a clinical professional, generally in a clinical setting. Practical experience is simultaneously related to theory. Clinical education is an unpaid learning experience.
Co-requisite(s): RNSG 2201 (2.0-8).

Course Type: Technical

RNSG 2263 Clinical - Registered Nursing 2 Credits
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Practical experience is simultaneously related to theory. Direct supervision is provided by the clinical professional.
Co-requisite(s): RNSG 2332 (2.0-8).

Course Type: Technical

RNSG 2271 Concepts of Advanced Nursing Practice and Management 2 Credits (1 Lec, 2 Lab)
This course provides the articulating student the opportunity to synthesize the roles of the professional nurse; application of systematic problem solving and critical thinking skills; focus on the care of patients throughout the lifespan with continued emphasis on leadership and management skills in the provision of care to small groups of adult clients and their families in multiple settings; and competency in knowledge, skills, and professional values within a legal/ethical framework. The focus of this course will be the care of the critically ill patient and nursing management.
Co-requisite(s): RNSG 2163

Course Type: Technical

RNSG 2332 Enhanced Concepts of Adult Health 3 Credits
This course covers enhanced concepts and skills for developing professional competencies in complicated nursing care situations involving adult patients/families with multiple body system problems. Emphasizes critical thinking, clinical reasoning and determining legal/ethical values for optimization of patient care in intermediate and acute care settings.
Co-requisite(s): RNSG 2263 (3.3-0).

Course Type: Technical
RNSG 55004  Leadership Development Institute  0.8 Credits
Prerequisite(s): None. The Leadership Development Institute provides tools and skill development that leaders need in order to achieve the goals of the organization. This course brings leaders together at one time and place for group learning and team building. The course intervals allow for feedback, coaching, and practice that leaders need to integrate new skills into their daily practice. Skill development will be focused in the following areas; accelerated achievement towards organizational goals, improved leadership performances, techniques to increase staff to high performers, added skill in budget management and labor productivity, higher employee satisfaction and improved patient safety. Note: Materials provided.

RNSG 55008  Introductory Clinical Practicum  2.4 Credits
Prerequisite(s): Grant eligible CHRISTUS St John employees. This course provides new nurses with insights and overviews of general patient conditions and status. Students will review national patient safety goals, blood glucose monitoring, proper use of restraints, Code Blue response, wound care techniques, medication administration, proper blood administration, basic respiratory therapy techniques and proper Meditech computer documentation. Note: Materials Provided.
NURSING / VOCATIONAL (VNSG)

VNSG 1119 Leadership and Professional Development 1 Credit  (1 Lec, 1 Lab)
This is a study of the importance of professional growth. Topics include the role of the licensed vocational nurse in the multidisciplinary health care team, professional organizations, and continuing education. Prerequisite(s): Reading level 7, Writing level 7, and Math level 8.
Course Type: Technical

VNSG 1162 Clinical III - Practical Nurse 1 Credit  (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The clinical practice offers the student continued experience in the nursing care of adult medical-surgical clients in a variety of clinical settings with a focus on gerontological nursing. Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Co-requisite(s): VNSG 1226
Course Type: Technical

VNSG 1226 Gerontology 2 Credits  (2 Lec, 0 Lab)
This course is an overview of the physical, psychosocial, and cultural aspects of the aging process which addresses disease processes of aging. The course also includes an exploration of perceptions toward care of the older adult. Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Co-requisite(s): VNSG 1162.
Course Type: Technical

VNSG 1230 Maternal-Neonatal Nursing 2 Credits  (2 Lec, 1 Lab)
This course focuses on the study of the biological, psychological, and sociological concepts applicable to basic needs of the family including childbirth and neonatal care. The course utilizes the nursing process in the assessment and management of the childbearing family. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium. Prerequisite(s): Reading level 7, Writing level 7, and Math level 8.
Co-requisite(s): VNSG 1234 and VNSG 2161
Course Type: Technical

VNSG 1234 Pediatrics 2 Credits  (2 Lec, 1 Lab)
This course is the study of the care of the pediatric patient and family, during health and disease with an emphasis on growth and developmental needs utilizing the nursing process. Prerequisite(s): Reading level 7, Writing level 7, Math level 8, and VNSG 1429.
Co-requisite(s): VNSG 1230 and VNSG 2161
Course Type: Technical

VNSG 1260 Clinical I 2 Credits  (0 Lec, 8 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite(s): Reading level 7, Writing level 7, Math level 8 and successful completion of VNSG 1423.
Course Type: Technical

VNSG 1261 Clinical II - Licensed Practical/Vocational Nursing Training 2 Credits  (0 Lec, 10 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite(s): Reading level 7, Writing level 7, Math level 8, VNSG 2431.
Co-requisite(s): VNSG 1429.
Course Type: Technical

VNSG 1301 Mental Health and Mental Illness 3 Credits  (3 Lec, 0 Lab)
This course includes factors influencing mental health and mental illness including personality development, human needs, common mental mechanisms, and factors influencing mental health and mental illness. The course also includes common mental disorders and related therapy. Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Course Type: Technical

VNSG 1327 Essentials of Medication Administration 3 Credits  (3 Lec, 1 Lab)
This course covers general principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. Prerequisite(s): Reading level 7, Writing level 7, Math level 8 and admission into the VNSG program.
Course Type: Technical

VNSG 1331 Pharmacology 3 Credits  (3 Lec, 1 Lab)
This course discusses the fundamentals of medications and their diagnostic, therapeutic, and curative effects. The course also includes nursing interventions utilizing the nursing process. Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Course Type: Technical

VNSG 1332 Medical-Surgical Nursing II 3 Credits  (3 Lec, 1 Lab)
This course is the continuation of Medical-Surgical Nursing I with application of the nursing process to the care of the adult patient experiencing medical-surgical conditions along the health-illness continuum in a variety of health care settings. Prerequisite(s): Reading level 7, Writing level 7, and Math level 8.
Co-requisite(s): VNSG 2160
Course Type: Technical
VNSG 1420  Anatomy and Physiology for Allied Health  4 Credits  (4 Lec, 1 Lab)
This course is the study of the structure (anatomy) and function (physiology) of the human body, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory and circulatory systems.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8 and admission into the VNSG program.
Course Type: Technical

VNSG 1423  Basic Nursing Skills  4 Credits  (3 Lec, 4 Lab)
This course provides instruction for the mastery of basic nursing skills and competencies for a variety of health care settings using the nursing process as the foundation for all nursing interventions.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8 and admission into the VNSG program.
Course Type: Technical

VNSG 1429  Medical - Surgical Nursing I  4 Credits  (4 Lec, 1 Lab)
This course is the application of nursing process to the care of the adult patient experiencing medical-surgical conditions along the health-illness continuum in a variety of health care settings.
Prerequisite(s): Reading level 7, Writing level 7, and Math level 8.
Co-requisite(s): VNSG 1261.
Course Type: Technical

VNSG 2160  Clinical IV - Licensed Practical/Vocational Nursing Training  1 Credit  (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts with direct supervision by a clinical professional. The clinical practice offers the student continued experience in the nursing care of adult medical-surgical clients in a variety of clinical settings with a focus on medical-surgical nursing.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Co-requisite(s): VNSG 1332
Course Type: Technical

VNSG 2161  Clinical V - Licensed Practical/Vocational Nurse Training  1 Credit  (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. The clinical practice offers the student experience in the nursing care of the maternal, newborn and pediatric patients.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8.
Co-requisite(s): VNSG 1230 and VNSG 1234
Course Type: Technical

VNSG 2431  Advanced Nursing Skills  4 Credits  (2 Lec, 6 Lab)
This course provides instruction for the application of advanced level nursing skills and competencies in a variety of health care settings utilizing the nursing process as a problem-solving tool.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8, and admission to the VNSG program.
Course Type: Technical

VNSG 41015  Disease Control and Prevention  1.6-1.6 Credits
VNSG 41016  Nutrition  1.6-3.2 Credits
VNSG 41019  Professional Development  1.6-3.2 Credits
VNSG 41033  Growth and Development  1.6-1.6 Credits
VNSG 41036  Mental Health  1.6-3.2 Credits
VNSG 41037  Vocational Nursing Update  0.7-3.2 Credits
VNSG 41039  Intravenous Therapy - Theory a  0.8-3.2 Credits
VNSG 41091  ST in Practical Nursing  0.7-11.2 Credits
VNSG 55001  Prevention and Intervention of Aggressive Behavior  1.6 Credits
Note: Textbook required; online resources available
This training focuses on prevention and offers proven strategies for safely defusing anxious, hostile, or violent behavior at the earliest possible stage. The course will also focus on current trends in hospital and mental health facilities as well as evidence based practices to help deal with disasters and crises in the health science professions.
OCCUPA HEALTH/SAFETY (OSHT)

OSHT 1003 Safety Supervisor 2.4 Credits
This course will enhance a line supervisor’s or crew leader’s understanding of the bigger picture of safety and his/her role in creating and maintaining a safe work environment. Students will learn how to read and use the Code of federal Regulations, specifically 29 CFR 1926 (OSHA Standards for the Construction Industry) and 29 CFR 1910 (OSHA Standards for General Industry). Supervisors will master how to win employees’ over for safety through specific actions. They will learn that a supervisor is responsible for setting the standard for safe behavior and promoting the company’s safety culture. As a supervisor comes to realize that his own actions influence safety outcomes, he will become a champion of safety.

OSHT 1307 Construction Site Safety and Health 3 Credits (3 Lec, 0 Lab)
This course provides an introduction to safety requirements for construction sites including occupational health and environmental controls.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, and Math level 6
Course Type: Technical

OSHT 1309 Physical Hazards Control 3 Credits (3 Lec, 0 Lab)
This course provides a study of the physical hazards in industry and methods of workplace design and redesign to control these hazards. Emphasis is on the regulation codes and standards associated with the control of physical hazards.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

OSHT 1313 Accident Prevention, Inspection and Investigation 3 Credits (3 Lec, 0 Lab)
This course provides a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

OSHT 1320 Energy Industrial Safety 3 Credits (3 Lec, 0 Lab)
This course is an overview for industrial workers of state/federal regulations and guidelines which require industrial safety training. Topics include the 29 CFR 1910, 1926, and National Fire Protection Association (NFPA) 70E standards such as confined space entry, emergency action, lock out/tag out, arc flash, and other work related subjects.
Prerequisite(s): Reading level 6, Writing level 6, Math level 6
Course Type: Technical

OSHT 1321 Fire Protection Systems 3 Credits (3 Lec, 0 Lab)
This course provides a study of fire protection systems and their applications with emphasis on the fire prevention codes and standards.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

OSHT 2305 Ergonomics and Human Factors in Safety 3 Credits (3 Lec, 0 Lab)
This course provides a study of the relationship of human behavior and ergonomics as applied to workplace safety.
Prerequisite(s): EPCT 1307, MATH 1314; Reading level 6, Writing level 6
Course Type: Technical

OSHT 2309 Safety Program Management 3 Credits (3 Lec, 0 Lab)
This course examines the major safety management issues that effect the workplace including safety awareness, loss control, regulatory issues, and human behavior modifications.
Prerequisite(s): EPCT 1307. Reading level 6, Writing level 6, Math level 6
Course Type: Technical

OSHT 2320 Safety Training Presentation Techniques 3 Credits (3 Lec, 0 Lab)
This course covers principles of developing and presenting effective industrial/business training. Emphasis is on instructor qualifications and responsibilities, principles of teaching including use of teaching aids, and presentation skills.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, and Math level 6
Course Type: Technical

OSHT 2380 Cooperative Education-Occupational Safety and Health Technology 3 Credits (1 Lec, 14 Lab)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the College, employer, and student. Under supervision of the College and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the work experience.
Prerequisite(s): department chair approval
Course Type: Technical

OSHT 2401 OSHA Regulations-General Industry 4 Credits (4 Lec, 0 Lab)
This course provides a study of Occupational Safety and Health Administration (OSHA) regulations pertinent to general industry.
Prerequisite(s): EPCT 1307; Reading level 6, Writing level 6, Math level 6
Course Type: Technical

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OSHT 15002 Fire Protection System 4.8 Credits
OSHT 15003 Safety and Accident Prevention 4.8 Credits
OSHT 15004 OSHA Regulations Genl Industry 6.4 Credits
OSHT 15007 Safety Training Presen Tech 4.8 Credits
OSHT 41001 Introduction to Safety and Hea 6.4-17.6 Credits
OSHT 41003 Workplace Safety 0.8-1.6 Credits
OSHT 41005 Construction Site Safety and H 3.2-6.4 Credits
OSHT 41007 ConstSiteSftyHth-CoreFastTrack 3.2-6.4 Credits
OSHT 41009 Physical Hazards Control 4.8-9.6 Credits
OSHT 41010 Powered Industrial Truck Certi 0.8-1.6 Credits
OSHT 41013 Safety and Accident Prevention 1.6-4.8 Credits
OSHT 41021 Fire Protection Systems 4.8-9.6 Credits
OSHT 41025 Safety Training Presentation T 3.2-9.6 Credits
OSHT 41091 Special Topics in Occupational 0.7-11.2 Credits
OSHT 42001 OSHA Regulations - General Ind 6.4-17.6 Credits
OSHT 42005 Ergonomics and Human Factors i 6.4-17.6 Credits
OSHT 42009 Occupational Safety and Health 1.6-4.8 Credits
OSHT 55001 Accident Prevention, Inspection & Investigation 4.8 Credits
OSHT 55002 Safety Program Mgmt 4.8 Credits
OSHT 55003 Construction Site Safety: Fast Track 3.2 Credits
OSHT 55004 Container Handler/Toploader 0.8 Credits
OSHT 55005 Heavy Lift Forklift II/Payload 0.8 Credits
OSHT 55006 Lashing & Securing 0.8 Credits
OSHT 55008 Core Construction Curriculum 3.8 Credits
OSHT 55010 NCCER Core Curriculum: Introductory Craft Skills 6.4 Credits
OSHT 55011 Core Construction Curr-Basic 4.55 Credits
OSHT 55012 How to Write Standard Operating Procedures (SOPs) 1.6 Credits
OSHT 55013 8 HR HAZWOPER Annual Refresher 0.8 Credits
OSHT 55014 MSSC Safety Module-FT 1.8 Credits
OSHT 55015 40HR HAZWOPER Seminar 4 Credits
OSHT 6.4-17.6 Credits
OSHT 55019 Layers of Protection Analysis 1.6 Credits
OSHT 55020 HazMat Awareness and Operations 1.6 Credits
OSHT 6.4-17.6 Credits
OSHT 55021 Fire Protection Systems 4.8-9.6 Credits
OSHT 55025 Safety Training Presentation T 3.2-9.6 Credits
OSHT 55030 Special Topics in Occupational 0.7-11.2 Credits
OSHT 55035 OSHA Regulations - General Ind 6.4-17.6 Credits
OSHT 55040 Ergonomics and Human Factors i 6.4-17.6 Credits
OSHT 55049 Occupational Safety and Health 1.6-4.8 Credits
OSHT 55051 Accident Prevention, Inspection & Investigation 4.8 Credits
OSHT 55052 Safety Program Mgmt 4.8 Credits
OSHT 55053 Construction Site Safety: Fast Track 3.2 Credits
OSHT 55054 Container Handler/Toploader 0.8 Credits
OSHT 55055 Heavy Lift Forklift II/Payload 0.8 Credits
OSHT 55056 Lashing & Securing 0.8 Credits
OSHT 55058 Core Construction Curriculum 3.8 Credits
Safety obligations of workers, supervisors, and managers; role of company policies and OSHA regulations; introduction to workplace hazards; basic construction math; introduction to and application of the proper use of hand tools; introduction to and application of the proper use and maintenance of power tools including drills, saws, ginders, and sanders; introduction to basic blueprint terms, components and symbols as well as different types of blueprints; basic communication skills between co-workers and supervisors; and basic employability skills.
OSHT 55059 Process Safety Management 1.6 Credits
Recognize common occupational hazards; describe the components of effective workplace design and accident prevention programs; and demonstrate correct selection and safe use of personal protective equipment.
OSHT 55060 Process Hazard Analysis 2.4 Credits
Identify common hazards and corrective actions in the workplace; and incorporate job safety analysis and appropriate training.
OSHT 55061 Layers of Protection Analysis 1.6 Credits
This course provides instruction on how to lead a Layers of Protection Analysis (LOPA) study, and how to interpret LOPA's with Process Hazard Analyses.
OSHT 55062 HazMat Awareness and Operations 1.6 Credits
Course topics include: The Legislation of Hazardous Waste (EPA), Hazwoper or Hazardous Waster Operation and emergency response, Hazard communication standard, identifying hazard, and site control.
OSHT 55021 Hazardous Materials (HAZMAT) State/Federal Regulations, Rules & Procedures Training 0.7 Credits
Prerequisite(s): None. This class addresses safety in a medical practice by explaining the HAZMAT issues that can make even a little spill deadly. The class will begin with a pre-test. At the conclusion of the course, participants will take a test showing eighty percent (80%) mastery of topics covered. At the conclusion of the training, trainees will be able to use respiratory protection correctly, use personal protective equipment correctly and appropriately, develop a blood-borne pathogens exposure control plan for their office, practice air monitoring, practice appropriate handling of bio-hazardous materials, understand appropriate record keeping associated with HAZMAT regulations, Develop a chemical hygiene plan for their office and practice hazard awareness. Note: Materials Provided.

OSHT 55022 OSHA Federal & State Compliance & Infectious Control Guidelines 1.2 Credits
Prerequisite(s): None. In this hybrid class of online and in-person instruction, the trainees will focus on the specific rules and regulations that oversee their medical practices. Each participant will have to pass a test in order to prove sufficient knowledge on the compliance area. At the conclusion of the training, trainees will be able to: apply new revisions in OSHA’s Compliance including Annual Review of Exposure Engineering Controls and Work Practices; apply the most recent Center for Disease Control (CDC) Guidelines for Hepatitis B; follow requirements for training and education of employees; apply replacements and updates to appendices; determine exposure and identify "at risk" situations; follow post-exposure procedures; dispose of infectious waste properly; and practice appropriate labeling and laundry procedures. Note: Materials provided.

OSHT 55023 ESL Workplace Safety 4 Credits
Prerequisite(s): Successful completion of ESL Level 4. Note: Textbook required ESL Workplace Safety is designed for the student who works in an industrial setting whose primary language is other than English. This course presents industry-related basic safety reading, writing, speaking, and listening skills. The emphasis is on high-frequency vocabulary (basic sight safety words), refining oral and written production that assists with listening skills for enhanced job productivity and safety, and increasing the control of the English sound system to minimize on-the-job miscommunication or misinterpretation due to foreign accent.

OSHT 55024 Safe Supervisor 2 Credits
Achieving an injury-free workplace takes a team effort. Your frontline supervisors interact with more employees on a daily basis and therefore, must understand their role in creating and maintaining a safe work environment. Safe Supervisor is a 3-day certificate course designed to enhance a frontline supervisor’s understanding of their safety responsibilities.

OSHT 55025 OSHA 30-Construction 3 Credits
Prerequisite(s): Successful completion of OSHA 10 Basic Safety Communications. This course is intended for supervisors or workers with some safety responsibility, and covers everything from Electrical Hazard Safety to Fall Protection, including, recognition, avoidance, abatement and prevention of safety and health hazards in the workplace.

OSHT 55026 OSHA 10-Construction 1 Credit
Prerequisite(s): None. This course teaches the recognition, abatement and prevention of safety and health hazards in the construction workplace. The course also provides information regarding workers rights, employer responsibilities and how to file a complaint. Course is designed to help workers stay up-to-date with their OSHA safety requirements.

OSHT 55027 Certified Occupational Safety Manager (COSM) 4 Credits
Prerequisite(s): Must have a minimum of two years of safety, health and environmental work experience. Materials are provided. This course is designed for high-level safety managers. The COSM program is an advanced, executive-level safety program consisting of: Essentials of Safety Management, Strategic Planning and Evaluating for Safety Success, Managing Risk, Safety Finance, Communicating the Safety Message, Injury Management and Incentives and Discipline.

OSHT 55028 Safety Technician 8.1 Credits
Prerequisite(s): Grant Eligibility OSCA Eligibility Note: Textbooks and Materials Provided An introduction to the basic concepts of safety and health. Learn to identify appropriate procedures to minimize or prevent injuries and illness in the workplace, incorporate job safety analysis (JSA) and appropriate training, and name the elements of an effective safety culture.

OSHT 55029 Scissor Lift Safety 0.8 Credits
Who faces a risk of electric shock during scissor lift operations. Upon completion of this course, the trainee will be able to identify the safety requirements of scissor lift operations, prevent accidents in lift-related activities, practice operator safety requirements, practice energized overhead line safety requirements, practice personnel protection requirements, practice basic techniques of electrical safety, and explain electrical safety skills for ground personnel working near lift operations.

OSHT 55030 Machine Shop Safety 1.2 Credits
This course teaches the safety measures a machinist must apply at all times in a machine shop. It includes a listing of the personal protective equipment that must be worn, fire safety procedures, lockout/tagout procedures, how to read Safety Data Sheets, and how to apply grinding and machine guard safety techniques.

OSHT 55031 Workplace Safety: Bloodborne Pathogens, Haz Mat & LOTO Awareness 0.8 Credits
Prerequisite(s): None Note: Materials provided An introduction to participate in learning techniques to achieve an awareness level in Hazardous Materials, Lock Out/Tag Out and Bloodborne Pathogens standard procedures. This training will meet the regulations for each area under 29 CFR 1910.20, 1910.1030 and 1910.147.

OSHT 55032 Safe Supervisor 2.4 Credits
Achieving an injury-free workplace takes a team effort. Your frontline supervisors interact with more employees on a daily basis and therefore, must understand their role in creating and maintaining a safe work environment. Safe Supervisor is a 3-day certificate course designed to enhance a frontline supervisor’s understanding of their safety responsibilities.
### OTHA 1160 Clinical - Occupational Therapy Assistant 1 Credit (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students are responsible for their own transportation to clinical sites. Course Type: Technical

### OTHA 1161 Clinical - Occupational Therapy Assistant 1 Credit (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students are responsible for their own transportation to clinical sites. Course Type: Technical

### OTHA 1162 Clinical - Occupational Therapy Assistant 1 Credit (0 Lec, 6 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students are responsible for their own transportation to clinical sites. Course Type: Technical

### OTHA 1241 Occupational Performance from Birth through Adolescence 2 Credits (1 Lec, 4 Lab)
This course covers occupational performance of newborns through adolescents. Includes frames of reference, evaluation tools and techniques, and intervention strategies. Course Type: Technical

### OTHA 1249 Occupational Performance of Adulthood 2 Credits (1 Lec, 4 Lab)
This course covers occupational performance of adults. Includes frames of reference, evaluation tools and techniques, and intervention strategies. Course Type: Technical

### OTHA 1253 Occupational Performance for Elders 2 Credits (1 Lec, 4 Lab)
This course covers occupational performance of elders. Includes frames of reference, evaluation tools and techniques, and intervention strategies. Course Type: Technical

### OTHA 1305 Principles of Occupational Therapy 3 Credits (2 Lec, 3 Lab)
This course is an introduction to occupational therapy including the historical development and philosophy. Emphasis on the roles of the occupational therapy assistant. Topics include occupation; occupational therapy personnel; current health care environment; and moral, legal, and ethical issues. Course Type: Technical

### OTHA 1309 Human Structure and Function in Occupational Therapy 3 Credits (2 Lec, 3 Lab)
This course is a study of the biomechanics of human motion. Emphasis on the musculoskeletal system including skeletal structure, muscles and nerves, and biomechanical assessment procedures. Course Type: Technical

### OTHA 1315 Therapeutic Use of Occupations or Activities I 3 Credits (2 Lec, 3 Lab)
This course covers various occupations or activities used as therapeutic interventions in occupational therapy. Emphasis on awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities. Course Type: Technical

### OTHA 1319 Therapeutic Interventions I 3 Credits (2 Lec, 3 Lab)
This course covers concepts, techniques, and assessments leading to proficiency in skills and activities used as treatment interventions in occupational therapy (OT). Emphasizes the occupational therapy assistant’s role in the OT process. Course Type: Technical

### OTHA 2209 Mental Health in Occupational Therapy 2 Credits (1 Lec, 4 Lab)
This course covers promotion of mental health and wellness through occupational therapy. Topics include theory and intervention strategies to enhance occupational performance. Course Type: Technical

### OTHA 2231 Physical Function in Occupational Therapy 2 Credits (1 Lec, 4 Lab)
This course covers physical function to promote occupational performance. Includes frames of reference, evaluative tools, intervention strategies, and consumer education. Course Type: Technical

### OTHA 2235 Health Care Management in Occupational Therapy 2 Credits (2 Lec, 0 Lab)
This course explores the roles of the occupational therapy assistant in health care delivery. Topics include documentation, reimbursement, credentialing, ethical standards, health care team role delineation, and management. Course Type: Technical

### OTHA 2266 Practicum (or Field Experience) - Occupational Therapy Assistant 2 Credits (0 Lec, 20 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students are responsible for their own transportation to clinical sites. Course Type: Technical

### OTHA 2267 Practicum (or Field Experience) - Occupational Therapy Assistant 2 Credits (0 Lec, 20 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Students are responsible for their own transportation to clinical sites. Course Type: Technical

### OTHA 2302 Therapeutic Use of Occupations or Activities II 3 Credits (2 Lec, 3 Lab)
This course is an emphasis on advanced techniques and applications used in traditional and non-traditional practice settings. Course Type: Technical

### OTHA 2304 Neurology in Occupational Therapy 3 Credits (2 Lec, 3 Lab)
This course is a study of neuroanatomy and neurophysiology as it relates to neurological conditions commonly treated in occupational therapy. Course Type: Technical
PAINTER/WALL COVERER (CBFM)

CBFM 1307 Boiler Operation 3 Credits (3 Lec, 1 Lab)
This course covers basic boiler operation with emphasis on high pressure and low pressure systems.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8

Course Type: Technical

CBFM 55000 General Mechanical Maintenance 3.2 Credits
An introduction to scheduling of repairs and preventive maintenance.
Topics include ordering supplies, inventory maintenance of supplies and equipment, work orders, and personnel scheduling.

CBFM 55001 API: 653 Aboveground Storage Tank Inspector-Test Prep 5.6 Credits
This program complemented the industries with standards on the construction, repair, inspection, alteration and maintenance of aboveground storage tanks. Inspectors are certified to inspect tanks in accordance with the API standard 653, Tank Inspection, Repair, Alteration, and Reconstruction of Aboveground Storage Tanks. The program promotes safe storage and material handling of petroleum products in a manner that protects employees, the public and the environment. The program was developed in accordance with storage tank owner/users, and establishes a uniform national program that will assist state and local governments in aboveground storage tank regulations.

CBFM 55002 NCCER Scaffolding 12 Credits
Prerequisite(s): None Note: Textbook Required. PPE to be purchased at the student's expense. Elevated work situations including ladders, scaffolding and work platforms. Also covers personal protective equipment. Demonstrate procedures for the use of ladders, scaffolds and fall protection; demonstrate the ability to erect, climb, descend, and work from elevated work platforms; and identify hazards associated with elevated work platforms.

CBFM 55003 OSCA Rigging and Scaffolding 8 Credits
Prerequisite(s): None Elevated work situation including ladders, rigging, scaffolding, work platforms, and aerial lifts. Also covers personal protective equipment.
PARALEGAL (LGLA)

LGLA 1301  Legal Research and Writing  3 Credits  (3 Lec, 0 Lab)
This course presents the fundamentals of legal research and writing emphasizing the paralegal's role including resources and processes used in legal research and writing.  
Prerequisite(s): Reading Level 6; Writing Level 6

Course Type: Technical

LGLA 1303  Legal Research  3 Credits  (3 Lec, 0 Lab)
This course presents legal research techniques emphasizing the paralegal's role. Topics include law library techniques, traditional hard copy legal research, computer assisted legal research, briefs, and legal memoranda.  
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307

Course Type: Technical

LGLA 1305  Legal Writing  3 Credits  (3 Lec, 0 Lab)
This course emphasizes the fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing. Topics include letters, case briefs, legal memoranda, trial and appellate briefs. It is recommended students take or have taken LGLA 1303, Legal Research.  
Prerequisite(s): Reading level 7, Writing level 7, LGLA 1307, ENGL 1301

Course Type: Technical

LGLA 1307  Introduction to Law and the Legal Professions  3 Credits  (3 Lec, 0 Lab)
This course offers an overview of the law and the legal professions including legal concepts, systems, and terminology; substantive areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

LGLA 1311  Introduction to Law  3 Credits  (3 Lec, 0 Lab)
This course presents legal terminology relating to substantive areas of law and the federal and state judicial systems. Emphasizes the paralegal's role in the legal system.  
Prerequisite(s): Reading Level 6; Writing Level 6

Course Type: Technical

LGLA 1313  Introduction to Paralegal Studies  3 Credits  (3 Lec, 0 Lab)
This course provides an overview of the paralegal profession including, professional regulation, trends and issues, ethical obligations, and the paralegal's role in the delivery of legal services.  
Prerequisite(s): Reading Level 6; Writing Level 6

Course Type: Technical

LGLA 1317  Law Office Technology  3 Credits  (3 Lec, 1 Lab)
This course introduces computer technology and software applications within the law office emphasizing the paralegal's role in the use of law office technology.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

LGLA 1343  Bankruptcy  3 Credits  (3 Lec, 0 Lab)
This course presents fundamental concepts of bankruptcy law and procedure with emphasis on the paralegal's role. Topics include individual and business liquidation and reorganization.  
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307

Course Type: Technical

LGLA 1345  Civil Litigation  3 Credits  (3 Lec, 0 Lab)
This course presents fundamental concepts and procedures of civil litigation including pretrial, trial, and post-trial phases of litigation and emphasizes paralegal's role in civil litigation. Topics include pretrial, trial, and post-trial phases of litigation.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

LGLA 1349  Constitutional Law  3 Credits  (3 Lec, 0 Lab)
This course presents an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Includes separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

LGLA 1351  Contracts  3 Credits  (3 Lec, 0 Lab)
This course presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law.  
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307

Course Type: Technical

LGLA 1353  Wills, Trusts, and Probate Administration  3 Credits  (3 Lec, 0 Lab)
This course covers fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical

LGLA 1355  Family Law  3 Credits  (3 Lec, 0 Lab)
This course presents fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law.  
Prerequisite(s): Reading level 6, Writing level 6

Course Type: Technical
LGLA 1359 Immigration Law 3 Credits (3 Lec, 0 Lab)
This course presents fundamental concepts of immigration law including substantive and procedural law related to visa applications, deportation, naturalization, and citizenship emphasizing the paralegal's role in immigration law.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2303 Torts and Personal Injury Law 3 Credits (3 Lec, 0 Lab)
This course covers the fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability with emphasis on the paralegal's role. It is a study of principles, methods, and investigative techniques utilized to locate, gather, document, and manage information related to tort and personal injury law.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2305 Interviewing and Investigating 3 Credits (3 Lec, 0 Lab)
This course is a study of techniques used to locate, gather, document, and manage information with emphasis on developing interview and investigative skills and the paralegal's role in interviewing and investigating legal matters.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2309 Real Property 3 Credits (3 Lec, 0 Lab)
This course presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in property law.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2311 Business Organizations 3 Credits (3 Lec, 0 Lab)
This course covers basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2313 Criminal Law and Procedure 3 Credits (3 Lec, 0 Lab)
This course introduces fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2323 Intellectual Property 3 Credits (3 Lec, 0 Lab)
This course presents the fundamentals of intellectual property law, including creation, procurement, preparation, and filing documents related to patents, copyrights, trademarks, and processes of intellectual property litigation with emphasis on the paralegal's role.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2333 Advanced Legal Document Preparation 3 Credits
This course emphasizes the use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1311, LGLA 1313 (3:3-0).
Course Type: Technical

LGLA 2335 Advanced Civil Litigation 3 Credits (3 Lec, 0 Lab)
This course implements advanced civil litigation techniques with emphasis on the paralegal's role and builds upon skills acquired in prior civil litigation courses. It is recommended students take or have taken LGLA 1345 Civil Litigation.
Prerequisite(s): Reading level 6, Writing level 6. Prerequisite or Co-requisite(s): LGLA 1307
Course Type: Technical

LGLA 2380 Cooperative Education-Legal Assistant/Paralegal 3 Credits (1 Lec, 15 Lab)
This course provides career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.
Prerequisite(s): Reading level 6, Writing level 6, LGLA 1307, ENGL 1301
Course Type: Technical

San Jacinto College 2018-2019
LGLA 41001 Legal Research and Writing 4.8-9.6 Credits
LGLA 41002 Introduction to Legal Assistance 1.6-4.8 Credits
LGLA 41019 Legal Ethics and Professional 1.6-4.8 Credits
LGLA 41021 Military Law I 4.8-4.8 Credits
LGLA 41045 Civil Litigation 4.8-9.6 Credits
LGLA 41046 Civil Litigation I 4.8-9.6 Credits
LGLA 41047 Civil Litigation II 4.8-9.6 Credits
LGLA 41051 Contracts 4.8-9.6 Credits
LGLA 41053 Wills, Trusts and Probate Administration 4.8-9.6 Credits
LGLA 41055 Family Law 4.8-9.6 Credits
LGLA 41091 Special Topics in Paralegal/Legal 0.7-11.2 Credits
LGLA 42003 Torts and Personal Injury Law 4.8-9.6 Credits
LGLA 42007 Law Office Management 4.8-9.6 Credits
LGLA 42009 Real Property 4.8-9.6 Credits
LGLA 42011 Business Organizations 4.8-9.6 Credits
LGLA 42013 Criminal Law and Procedure 4.8-9.6 Credits
LGLA 42021 Military Law II 4.8-4.8 Credits
LGLA 42031 Advanced Legal Research and Writing 4.8-9.6 Credits
LGLA 42035 Advanced Civil Litigation 4.8-9.6 Credits
LGLA 42039 Certified Legal Assistant Review 1.6-4.8 Credits
LGLA 42088 Internship - Paralegal/Legal Assistant 4.8-57.6 Credits
LGLA 42089 Internship - Paralegal/Legal Assistant 4.8-57.6 Credits
LGLA 55001 Certified Paralegal Exam Review 4 Credits
This course provides the information and mock testing to prepare for the CP/CLA Certification Exam.
LGLA 55002 Wills, Trusts & Probate Administration 4.8 Credits
This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. The student will define and properly use terminology relating to wills, trusts, and probate administration; locate, describe, and analyze sources of law relating to wills, trusts, and probate administration; describe the role and ethical obligations of the paralegal in wills, trusts, and probate administration; and draft documents commonly used in wills, trusts, and probate administration. (LGLA 1353)
LGLA 55003 Real Property 4.8 Credits
Prerequisite(s): LGLA 1307 and Reading Level 4 This course presents fundamental concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and recording and searching for real estate documents.
LGLA 55004 Business Organizations 4.8 Credits
Prerequisite(s): LGLA 1307 This course presents basic concepts of business organizations with emphasis on the paralegal's role. Topics include law of agency, sole proprietorships, forms of partnerships, corporations, and other emerging business entities. The student will define and properly use terminology relating to business organizations; locate, describe, and analyze sources of law relating to business organizations; describe the role and ethical obligations of the paralegal relating to formation, operation, and termination of the various business entities; describe the formation, operation, and termination of business entities; and draft documents required for the formation, operation, and termination of business entities. (LGLA 2311)
LGLA 55005 Interviewing and Investigating 4.8 Credits
Prerequisite(s): LGLA 1307; Reading Level 4 This course is a study of techniques used to locate, gather, document, and manage information with emphasis on developing interview and investigative skills and the paralegal's role in interviewing and investigating legal matters. (LGLA 2305)
LGLA 55006 Civil Litigation 4.8 Credits
Prerequisite or Co-requisite(s): LGLA 1307, Reading Level 4 This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post trial phases of litigation. The student will define and properly use terminology relating to civil litigation, locate, describe, and analyze sources of law relating to the civil litigation process, describe the role and ethical obligations of the paralegal in civil litigation; and draft documents commonly used in civil litigation. (LGLA 1345)
LGLA 55007 Constitutional Law 4.8 Credits
Prerequisite or Co-requisite(s): LGLA 1307, Reading Level 4. This course presents an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Includes separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government. (LGLA 1349)
LGLA 55008 Criminal Law and Procedure 4.8 Credits
Prerequisite or Co-requisite(s): LGLA 1307, Reading level 4 This course introduces the criminal justice system including procedures from arrest to final disposition, principles of federal and state law, and the preparation of pleadings and motions. The student will define and properly use terminology relating to criminal law; describe sources of law relating to criminal law; locate and analyze cases and statutes relating to criminal law; describe the role and ethical obligations of the paralegal relating to criminal law; and draft documents commonly used in criminal law. (LGLA 2313)
LGLA 55009 Family Law 4.8 Credits
Prerequisite or Co-requisite(s): LGLA 1307, Reading level 4 This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, adoption, and the parent-child relationship. The student will define and properly use terminology relating to family law; locate, describe, and analyze sources of law relating to family law; describe the role and ethical obligations of the paralegal in family law; and draft documents commonly used in family law. (LGLA 1355)
LGLA 55010 Intro Law and Legal Profession 4.8 Credits
Prerequisite(s): Reading level 4 This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal. The student will develop a legal vocabulary; explain fundamental legal concepts and systems; explain the ethical obligations. (LGLA 1307)
LGLA 55011 Law Office Technology 6.4 Credits
Prerequisite(s): None This course introduces computer technology and its applications within the law office. Topics include the use of computer technology in the delivery of legal services with particular emphasis on the paralegal's role. (LGLA 1317)
LGLA 55012 Legal Research 4.8 Credits
Prerequisite or Co-requisite(s): LGLA 1307 This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques, traditional hardcopy legal research, computer assisted legal research, briefs, and legal memoranda. The student will locate, read, and understand primary and secondary legal authority, design and implement effective legal research strategies; and be familiar with computer assisted legal research tools and the proper role of these tools. (LGLA 1303)

LGLA 55013 Legal Writing 4.8 Credits
Prerequisite(s): LGLA 1307, ENGL 1301 This course presents the fundamentals of legal writing techniques. Topics include letters, case briefs, legal memoranda, trial and appellate briefs, case and fact analysis, citation forms, and legal writing styles. It is recommended you take or have taken LGLA 1303, Legal Research. (LGLA 1305)

LGLA 55014 Torts Law and Personal Injury 4.8 Credits
Prerequisites or Co-requisite(s): LGLA 1307, Reading level 4 This course is a study of principles, methods, and investigative techniques utilized to locate, gather, document, and manage information related to tort and personal injury law, with an emphasis on developing interviewing and investigative skills to prepare the paralegal to communicate effectively while recognizing ethical problems in this area of flow. (LGLA 2303)
PERSONAL TRAINER (FITT)

FITT 1237 Personal Training 2 Credits (2 Lec, 0 Lab)
This course is a study of the aspects of one-on-one training, including marketing, program development, legal aspects, documentation, training methodologies, and business considerations. Emphasis is on the development of safe and enjoyable individualized training sessions.
Co-requisite(s): FITT 2413.

Course Type: Technical

FITT 1303 Fitness Event Planning and Promotion 3 Credits (3 Lec, 0 Lab)
This course is a study of the practical aspects of developing and scheduling group exercise fitness classes, including recreational activities, competitive activities, and promotion of exercise and non-exercise activities. Emphasis is on the design of safe, enjoyable activities.
Course Type: Technical

FITT 2301 Lifestyle Change for Wellness 3 Credits (3 Lec, 0 Lab)
This course is a study of the components of weight control, healthy nutrition, smoking cessation, stress management and other current trends will be covered. Included are techniques in behavior modification, motivation, teaching and counseling.
Co-requisite(s): HPRS 1202.

Course Type: Technical

FITT 2309 Theory of Exercise Program Design and Instruction 3 Credits (2 Lec, 3 Lab)
The study of health related components of physical fitness including cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. Topics include the theoretical basis underlying physical fitness; instructional techniques for fitness development; and methods for leading an exercise session, including design, instruction and evaluation.
Co-requisite(s): FITT 2471.

Course Type: Technical

FITT 2413 Exercise Science 4 Credits (4 Lec, 0 Lab)
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical fitness. Emphasis on physiological responses and adaptations to exercise. Topics include basic elements of kinesiology, biomechanics, motor learning, and the physical fitness industry.
Co-requisite(s): FITT 1237.

Course Type: Technical

FITT 2471 Kinesiology and Biomechanics 4 Credits (3 Lec, 2 Lab)
This course is a continuation of the study of scientific principles, methodologies, and research as applied to exercise and physical fitness. Emphasis is on physiological responses and adaptations to exercise.
Prerequisite(s): FITT 2413.
Co-requisite(s): FITT 2309.
Course Type: Technical

FITT 55000 Personal Training Education and Certificate Program 4.8 Credits
The personal training education course is to develop your talents, skills and abilities in regard to the delivery of competent, safe and effective personal training services. The academic and experiential training program is designed to expose you to an initial body of knowledge that, once acquired, will give you the requisite skills to start the process toward becoming a professional personal trainer.
PHARMACY TECHNICIAN (PHRA)

PHRA 1202 Pharmacy Law 2 Credits (2 Lec, 0 Lab)
This course is an overview of federal and state laws governing the practice of pharmacy. The role of the pharmacy technician and the pharmacist and their associated responsibilities. Includes Code of Ethics, patient confidentiality, and a comparison of legal and ethical aspects.
Course Type: Technical

PHRA 1243 Pharmacy Technician Certification Review 2 Credits (2 Lec, 0 Lab)
This course covers a review of major topics covered on the national Pharmacy Technician Certification Examination (PTCE). Co-requisite(s): PHRA 1261, PHRA 2261
Course Type: Technical

PHRA 1261 Clinical-Pharmacy Technician I 2 Credits (0 Lec, 10 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): PHRA 1345, PHRA 1347, PHRA 1349, PHRA 1441
Course Type: Technical

PHRA 1301 Introduction to Pharmacy 3 Credits (3 Lec, 0 Lab)
This is an overview of the qualifications, operational guidelines, and job duties of a pharmacy technician.
Course Type: Technical

PHRA 1305 Drug Classification 3 Credits (3 Lec, 0 Lab)
This is a study of pharmaceutical drugs, abbreviations, classifications, dosages, side effects, and routes of administration.
Course Type: Technical

PHRA 1309 Pharmaceutical Mathematics I 3 Credits (3 Lec, 0 Lab)
This course covers solving pharmaceutical calculation problems encountered in the preparation and distribution of drugs.
Course Type: Technical

PHRA 1313 Community Pharmacy Practice I 3 Credits (2 Lec, 3 Lab)
This course is an introduction to the skills necessary to process, prepare, label and maintain records of prescriptions in a community pharmacy to include customer service, count and pour techniques, prescription calculations, drug selection and preparation, over-the-counter drugs, inventory management and legal parameters.
Course Type: Technical

PHRA 1345 Compounding Sterile Preparations and Aseptic Technique 3 Credits (2 Lec, 3 Lab)
This is a study of the process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP <797> standards.
Prerequisite(s): PHRA 1309
Course Type: Technical

PHRA 1347 Pharmaceutical Mathematics II 3 Credits (3 Lec, 0 Lab)
This course focuses on advanced concepts of Pharmaceutical Mathematics I.
Prerequisite(s): PHRA 1309
Course Type: Technical

PHRA 1349 Institutional Pharmacy Practice 3 Credits (2 Lec, 3 Lab)
This course covers fundamentals of the diverse roles and practice of pharmacy technicians in an institutional pharmacy setting. In-depth coverage of hospital pharmacy organization, work flow and personnel, safety techniques, data entry, packaging and labeling operations, inpatient drug distribution systems including investigational drugs, continuous quality improvement and inventory control.
Prerequisite(s): PHRA 1313
Course Type: Technical

PHRA 1360 Clinical: Community Pharmacy 3 Credits (0 Lec, 12 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): PHRA 1345, 1347, 1349, 1441
Course Type: Technical

PHRA 1441 Pharmacy Drug Therapy and Treatment 4 Credits (4 Lec, 0 Lab)
This course is the study of therapeutic agents, their classifications, properties, actions, and effects on the human body and their role in the management of disease.
Prerequisite(s): PHRA 1305
Course Type: Technical

PHRA 2261 Clinical-Pharmacy Technician II 2 Credits (0 Lec, 10 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): PHRA 1345, PHRA 1347, PHRA 1349, and PHRA 1441
Course Type: Technical

PHRA 2360 Clinical: Institutional Pharmacy 3 Credits (0 Lec, 12 Lab)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): PHRA 1345, 1347, 1349, and 1441
Course Type: Technical
PHRA 41001  Introduction to Pharmacy  4.8-4.8 Credits
PHRA 41002  Pharmacy Law  1.6-3.2 Credits
PHRA 41003  Pharmaceutical Update for Heal  0.7-4.8 Credits
PHRA 41004  Pharmacotherapy and Disease Pr  4.8-9.6 Credits
PHRA 41005  Drug Classification  3.2-9.6 Credits
PHRA 41006  Computerized Drug Delivery Sys  4.8-9.6 Credits
PHRA 41009  Pharmaceutical Mathematics I  3.2-9.6 Credits
PHRA 41013  Community Pharmacy Practice  4.8-12.8 Credits
PHRA 41041  Pharmacy Drug Therapy and Tre  8-14.4 Credits
PHRA 41042  Computerized Drug Delivery Sys  3.2-8 Credits
PHRA 41043  Pharmacy Technician Certificat  1.6-3.2 Credits
PHRA 41044  Drug Update  0.8-0.8 Credits
PHRA 41045  Intravenous Admixture and Ster  4.8-12.8 Credits
PHRA 41046  Assisting the Pharmacist in Se  0.8-0.8 Credits
PHRA 41047  Pharmaceutical Mathematics II  3.2-9.6 Credits
PHRA 41049  Institutional Pharmacy Practic  4.8-12.8 Credits
PHRA 41060  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 41061  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 41062  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 41063  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 41064  Practicum (or Field Experience  11.2-64 Credits
PHRA 41065  Practicum (or Field Experience  11.2-64 Credits
PHRA 41066  Practicum (or Field Experience  11.2-64 Credits
PHRA 41067  Practicum (or Field Experience  11.2-64 Credits
PHRA 41068  Practicum (or Field Experience  11.2-64 Credits
PHRA 41069  Practicum (or Field Experience  11.2-64 Credits
PHRA 41091  Special Topics in Pharmacy Tec  0.7-11.2 Credits
PHRA 42060  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 42061  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 42062  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 42063  Clinical - Pharmacy Technician  4.8-57.6 Credits
PHRA 42064  Practicum (or Field Experience  11.2-64 Credits
PHRA 42065  Practicum (or Field Experience  11.2-64 Credits
PHRA 42066  Practicum (or Field Experience  11.2-64 Credits
PHRA 42067  Practicum (or Field Experience  11.2-64 Credits
PHRA 42068  Practicum (or Field Experience  11.2-64 Credits
PHRA 42069  Practicum (or Field Experience  11.2-64 Credits
PHRA 49001  Pharmacy Tech  .7 Credits
PHRA 49002  Pharmacy Technician (H.S.)  60 Credits
PHRA 55000  Pharmacy Technician Certification Review  3.2 Credits

This in-depth review prepares you to take the National Pharmacy Technician Association (NPTA) Certification Exam. The class reviews pharmacy practice areas such as federal laws/ethics, medication distribution, inventory control systems, pharmacy operations, packaging, sterile products and safe handling of anti-neoplastic drugs. You will also review basic math calculations as well as advanced math skills required to compound sterile products, prepackaged dosages, prepare medications and collect and analyze data.

PHRA 55001  IV Certification Review  2.4 Credits
Prerequisite(s): None. A study of sterile products, hand washing techniques, pharmaceutical calculations, references, safety techniques, aseptic techniques in parenteral compounding, proper use of equipment, preparation of sterile products, and safe handling of antineoplastic drugs. Note: Textbook required.

PHRA 55002  Compounding Sterile Preparations and Aseptic Techniques  6.4 Credits
Prerequisite(s): PHRA 1309. Note: No Materials Required. A study of the process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP standards. Students will learn to apply pharmaceutical and medical terminology and abbreviations used in processing medication orders and sterile product labels. Students will demonstrate procedures and techniques consistent with USP standards. These will include the performance of dosage calculations required for sterile product preparation, including the safe handling and preparation of hazardous drugs. (PHRS 1345).

PHRA 55003  Pharmacy Terminology  4.8 Credits
( PHRA 1375)
Prerequisite(s): None Textbook required

PHRA 55004  Sterile Compounding & IV Certification  4 Credits
Prerequisite(s): Department approval is required. Call 281-669-4702 OR 281-998-6150 X 3997 for approval. The course is for Certified Pharmacy Technicians and Licensed Pharmacists. Note: No materials are required. The test fee for the certification exam is included in the cost of the course. A textbook is required in advance of the class start date. A textbook is available at the South Campus only. A study of the process of compounding sterile preparations and aseptic technique within legal and regulatory guidelines specified by USP standards. Students will learn to apply pharmaceutical and medical terminology and abbreviations used in processing medication orders and sterile product labels. Students will demonstrate procedures and techniques consistent with USP standards. These will include the performance of dosage calculations required for sterile product preparation, including the safe handling and preparation of hazardous drugs.
PHILOSOPHY (PHIL)

PHIL 1301 Introduction to Philosophy 3 Credits (3 Lec, 0 Lab)
This course provides a general overview of the historical development and the major systems of philosophic thought, the nature of man, knowledge, morality, social and political theory, and the existence of God.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

PHIL 1304 Introduction to World Religions 3 Credits (3 Lec, 0 Lab)
Introduction to World Religions is a survey course in philosophy designed to familiarize students with the major theories of world religions. Students will establish broad and multiple perspectives of religious theory and evaluate theories of religion. This course is a survey and critical examination of major theories concerning world religions.
Prerequisite(s): Reading level 7 and Writing level 7

Course Type: Academic

PHIL 2303 Logic I 3 Credits (3 Lec, 0 Lab)
This is a study of nature and methods of correct reasoning, deductive proof, fallacies, and arguments.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

PHIL 2306 Introduction to Ethics 3 Credits (3 Lec, 0 Lab)
This course offers a general overview of classical and contemporary theories concerning the good life, human conduct in society, moral and ethical standards and the nature, criteria, sources, logic, and validity of moral value judgments.
Prerequisite(s): Reading level 7, Writing level 7

Course Type: Academic

PHIL 2307 Introduction to Social and Political Philosophy 3 Credits (3 Lec, 0 Lab)
This is a survey course in philosophy designed to familiarize students with the major theories concerning the organization of societies and governments. Students will establish broad and multiple perspectives of social and political theory and evaluate theories of justice and how to be a responsible member of society.
Prerequisite(s): Reading level 7 and Writing level 7

Course Type: Academic
PHLEBOTOMY (PLAB)

PLAB 1223 Phlebotomy 2 Credits (2 Lec, 1 Lab)
This course covers skill development in the performance of a variety of blood collection methods using proper techniques and standard precautions. It includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children, and infants. It covers infection prevention, patient identification, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology.
Course Type: Technical

PLAB 5500 Phlebotomy Technician Basic 4.8 Credits
Prerequisite(s): Proof of high school diploma/GED completion is required.
Note: Must also enroll in the Phlebotomy Practicum; textbook is required.
Students are involved in skill development to perform a variety of blood collection methods using proper techniques and universal precautions. This course includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children and infants. Emphasis on infection prevention, proper patient identification, labeling of specimens and quality assurance, specimen handling, processing, and accessioning. Topics include professionalism, ethics, and medical terminology. For students in this course who may have a criminal background, please be advised that the background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

PLAB 55001 Phlebotomy Technician Practicum 11.2 Credits
Prerequisite(s): Proof of high school diploma/GED completion. Proof of a current negative TB skin test and Hepatitis B vaccine. Background check and drug screening through PreCheck are required and is an additional student expense. See website for instructions. Additional immunizations are required to attend clinicals. (List is on website) Note: Must also be enrolled in Phlebotomy Technician Basic. Course begins after successful completion of Phlebotomy Technician Basic. Clinicals are usually eight-hour weekdays. Dates, times and location determined by instructor. This is a work-based learning experience with direct client care. This course enables the student to apply the theory, skills and concepts learned in the basic phlebotomy class in a supervised clinic or lab setting. Specific learning objectives are developed by the faculty. For students in this course who may have a criminal background, please be advised that the background could keep you from being licensed by the State of Texas. If you have a question about your background and licensure, please speak with your faculty member or the department chair. You also have the right to request a criminal history evaluation letter from the applicable licensing agency.

PLAB 55002 Donor Phlebotomy Technician 8 Credits
Skill development in the performance of blood collection and processing methods specific to blood banking. Includes procedures to determine donor eligibility, phlebotomy specimen collection using capillary and venipuncture techniques, and processing and storage of specimens and components. Special emphasis is placed upon Centers for Disease Control use of standard precautions of infection.

PLAB 55003 Current Practices in Phlebotomy 8 Credits
This course will revitalize student knowledge and refresh both the didactic content and the current clinical practices of Phlebotomy. Students will address changes in the field, review and practice clinical skills and proper procedures, consider and choose appropriate workplace applications, quality customer/client/patient service and review national certification content in preparation for the ASCP exam. Supervised lab opportunities will be provided to renew and practice hands on skills.
Note: This course is intended only for individuals who have already successfully completed both the phlebotomy course and the clinical practice or rotation.

PLAB 55004 Phlebotomy Work-based Learning Experience 16 Credits
A health-related work-based learning experience that will enhance the student’s ability to apply specialized occupational theory, skills, and concepts by providing real time clinical education in a more advanced clinical education setting. Students will be assigned a trainer/mentor who is clinical professional and will provide direct supervision and feedback.
PHED WAIV  PHED Waiver  0 Credits
Course Type: Academic

PHED 1101  Beginning Tennis  1 Credit  (0 Lec, 3 Lab)
This course introduces students to beginning skills and strategies in tennis. Lecture topics include history, rules, strategy (both singles and doubles), etiquette, proper care and selection of equipment and proper attire.
Course Type: Academic

PHED 1102  Advanced Tennis  1 Credit  (0 Lec, 3 Lab)
This course includes instruction of advanced techniques, development of a variety of strokes, singles and doubles strategy in game situations and USTA tournament rules and procedures.
Prerequisite(s): PHED 1101 or department chair approval
Course Type: Academic

PHED 1104  Volleyball  1 Credit  (0 Lec, 3 Lab)
The student will receive instruction in the skills of passing, setting, spiking, service and blocking. Basic offensive and defensive strategies, rules, tournament play and officiating will be covered.
Course Type: Academic

PHED 1105  Beginning and Intermediate Swimming  1 Credit  (0 Lec, 3 Lab)
This course offers explanation, demonstration, and practice in the five basic strokes, diving, survival skills, and basic elements of water safety.
Course Type: Academic

PHED 1106  Canoeing  1 Credit  (0 Lec, 3 Lab)
Lectures, demonstrations and practice in the basic skills and techniques of canoeing are included. Additional fee required.
Course Type: Academic

PHED 1109  Racquetball  1 Credit  (0 Lec, 3 Lab)
This course introduces the student to the rules, terms, safety, basic skills and strategies necessary to play racquetball.
Course Type: Academic

PHED 1110  Advanced Racquetball  1 Credit  (0 Lec, 3 Lab)
This course includes instruction in advanced techniques, stroke development, offensive and defensive strategies in game situations, refereeing, serving techniques and strategies, and tournament play.
Prerequisite(s): PHED 1109 or department chair approval
Course Type: Academic

PHED 1111  Bowling  1 Credit  (0 Lec, 3 Lab)
This course introduces the student to the basic skills and techniques of bowling. Class hours will include instruction in etiquette, selection of equipment, basic techniques, scoring, computing handicaps, league play, and a variety of tournaments. This course is conducted off-campus and requires an additional fee.
Course Type: Academic

PHED 1112  Badminton  1 Credit  (0 Lec, 3 Lab)
This course covers lectures, demonstrations and practice in the basic skills and techniques of badminton.
Course Type: Academic

PHED 1113  Golf  1 Credit  (0 Lec, 3 Lab)
Basic skills in playing golf are stressed, including rules and etiquette of the game.
Course Type: Academic

PHED 1114  Jogging  1 Credit  (0 Lec, 3 Lab)
A variety of methods and materials are presented in the area of cardiovascular and overall physical fitness.
Course Type: Academic

PHED 1116  Water Aerobics  1 Credit  (0 Lec, 3 Lab)
This is a total body fitness program including cardiovascular and muscular endurance, strength and flexibility in the water. Emphasis is placed on improving muscle tone and maintaining a healthy body weight through water fun and fitness activities.
Course Type: Academic

PHED 1117  Aerobic Activities  1 Credit  (0 Lec, 3 Lab)
This is a cardiovascular conditioning program designed to improve muscle tone and to help maintain a healthy body weight through fun and fitness activities.
Course Type: Academic

PHED 1118  Advanced Aerobics  1 Credit  (0 Lec, 3 Lab)
This course is an advanced cardiovascular conditioning program. It is designed to increase energy, mental clarity and health as part of one's lifestyle. This class will incorporate high energy and low impact movements. Some classes include bench-step aerobics.
Prerequisite(s): PHED 1117 or department approval
Course Type: Academic

PHED 1119  Exercise for Health and Fitness  1 Credit  (0 Lec, 3 Lab)
This course is designed to provide students with an essential knowledge of exercise and fitness on health using lecture, reading, labs on health related fitness components and fitness activities. This course will provide an understanding of cardiovascular disease, risk factors and the role of exercise in prevention. Labs will include fitness testing, self assessments and maintenance programs, nutritional analysis, and individualized programs. A variety of activities will be used including low impact aerobics, power walking, bench stepping, toning and flexibility exercises, and weights.
Course Type: Academic

PHED 1120  Basketball  1 Credit  (0 Lec, 3 Lab)
This course covers basic skills and techniques of basketball.
Course Type: Academic

PHED 1121  Slow Pitch Softball  1 Credit  (0 Lec, 3 Lab)
This course covers development of basic techniques and skills of slow-pitch softball.
Course Type: Academic

PHED 1122  Soccer  1 Credit  (0 Lec, 3 Lab)
This course covers lectures, demonstrations and practice in basic skills and techniques of soccer.
Course Type: Academic

PHED 1123  Weight Training  1 Credit  (0 Lec, 3 Lab)
This course covers lectures, demonstrations and practice in the basic skills and techniques of weight training.
Course Type: Academic
**PHED 1124 Advanced Weight Training  1 Credit  (0 Lec, 3 Lab)**
This course builds upon basic skills and knowledge of weight training. Topics covered include advanced lifting technique, advanced training theory, biomechanics, and in-depth understanding of the components of fitness.
Prerequisite(s): PHED 1123 or instructor approval.
Course Type: Academic

**PHED 1126 Team Sports  1 Credit  (0 Lec, 3 Lab)**
This course provides the student with opportunities to participate in a variety of team sports. Volleyball, basketball, flag football, soccer, softball, and floor hockey are included.
Course Type: Academic

**PHED 1130 Modern Dance  1 Credit  (0 Lec, 3 Lab)**
This course covers the fundamental techniques of movement and practice in beginning composition.
Course Type: Academic

**PHED 1131 Advanced Modern Dance  1 Credit  (0 Lec, 3 Lab)**
This course covers advanced skills and techniques in movement with emphasis on choreography.
Course Type: Academic

**PHED 1133 Beginning Jazz  1 Credit  (0 Lec, 3 Lab)**
This course includes basics and background in varied jazz dance forms, from blues to funky, stressing presentation and exploration to creative potential.
Course Type: Academic

**PHED 1134 Yoga I  1 Credit  (0 Lec, 3 Lab)**
This is an introduction to basic yoga postures, breathing, and relaxation techniques with emphasis on physical practice.
Course Type: Academic

**PHED 1135 Social Dance  1 Credit  (0 Lec, 3 Lab)**
This course is designed to offer students instruction in the fundamentals of social dance patterns and the more basic ballroom dance steps.
Course Type: Academic

**PHED 1136 Beginning Tap Dance  1 Credit  (0 Lec, 3 Lab)**
This course covers fundamentals of beginning tap movement and basic steps with emphasis on combination and techniques.
Course Type: Academic

**PHED 1137 Beginning Ballet  1 Credit  (0 Lec, 3 Lab)**
This is an introduction to the theory and terminology of classical ballet with emphasis on techniques including barre and centre work.
Course Type: Academic

**PHED 1138 Intermediate and Advanced Ballet  1 Credit  (0 Lec, 3 Lab)**
This course covers theory and terminology of pointe and pas de deux with greater emphasis on centre and allegro work.
Course Type: Academic

**PHED 1139 Yoga II  1 Credit  (0 Lec, 3 Lab)**
This course is an extension of Yoga I, designed to provide students with expanded knowledge of life management skills by placing emphasis on yoga's strength, flexibility and stress reduction techniques. Lectures and practice will also focus on concentration techniques, nutrition and self-assessment.
Prerequisite(s): Yoga I or instructor approval.
Course Type: Academic

**PHED 1140 Martial Arts  1 Credit  (0 Lec, 3 Lab)**
Practice and training in the physical and psychological aspects of self-defense and sport is provided through vigorous flexibility, muscular endurance, and technical instruction. Technical instruction will include martial arts skills, combination tactics and sparring training using partner drills, solo work, and pad drills.
Course Type: Academic

**PHED 1141 Advanced Jazz  1 Credit  (0 Lec, 3 Lab)**
This course is designed for the advanced jazz student who wants to develop technical expertise beyond the beginning level of jazz.
Prerequisite(s): PHED 1133.
Course Type: Academic

**PHED 1142 Fitness Swimming  1 Credit  (0 Lec, 3 Lab)**
This is a course designed to promote participation in the lifetime sport of swimming. Lectures and practice in the basic swimming strokes will be done. Daily workouts promoting cardiovascular endurance will be emphasized. Students should be good swimmers to take this class.
Course Type: Academic

**PHED 1143 Fitness Walking  1 Credit  (0 Lec, 3 Lab)**
This course introduces students to walking as a lifetime fitness activity. Emphasis is placed on correct form and pacing to maintain working heart rate. Other topics covered are proper shoe selection, training principles for improved cardiovascular fitness, safety, and injury prevention.
Course Type: Academic

**PHED 1144 Camping  1 Credit  (0 Lec, 3 Lab)**
This course includes lectures, demonstrations, practices and field trips related to camping. Other topics may be included such as hiking, backpacking and similar topics.
Course Type: Academic

**PHED 1145 Kickboxing for Fitness  1 Credit  (0 Lec, 3 Lab)**
Kickboxing is a fitness program designed to improve muscle tone and cardiovascular endurance through constant motion and repetition using martial arts techniques. A variety of techniques and some martial arts applications are taught.
Course Type: Academic

**PHED 1164 Introduction to Physical Fitness and Wellness  1 Credit  (0 Lec, 3 Lab)**
This course will provide an overview of the lifestyle necessary for fitness and health. Students will participate in physical activities and assess their fitness status. Students will be introduced to proper nutrition, weight management, cardiovascular health, flexibility, and strength training.
Course Type: Academic
PHED 1301 Foundations of Kinesiology 3 Credits (3 Lec, 0 Lab)
The purpose of this course is to provide students with an introduction to human movement that includes the historical development of physical education, exercise science, and sport. This course offers the student both an introduction to the knowledge base, as well as information on expanding career opportunities.
Prerequisite(s): Reading level 6
Course Type: Academic

PHED 1304 Personal/Community Health 3 Credits (3 Lec, 0 Lab)
This course provides an introduction to the fundamentals, concepts, strategies, applications, and contemporary trends related to understanding personal and/or community health issues. This course also focuses on empowering various populations with the ability to practice healthy living, promote healthy lifestyles, and enhance individual well-being.
Prerequisite(s): Reading level 6
Course Type: Academic

PHED 1306 First Aid 3 Credits (3 Lec, 0 Lab)
This course covers instruction and practice for emergency care. Designed to enable students to recognize and avoid hazards within their environment, to render intelligent assistance in case of accident or sudden illness, and to develop skills necessary for the immediate and temporary care of the victim. Successful completion of the course may enable the student to receive a certificate from a nationally recognized agency.
Course Type: Academic

PHED 1308 Sports Officiating 3 Credits (3 Lec, 0 Lab)
The purpose of the course is to study officiating requirements for sports and games with an emphasis on mechanics, rule interpretation, and enforcement.
Course Type: Academic

PHED 1338 Concepts of Physical Fitness 3 Credits (2 Lec, 3 Lab)
This course is designed to familiarize students with knowledge, understanding and values of health related fitness and its influence on the quality of life emphasizing the development and implementation of fitness programs. This course will not satisfy one hour of physical education activity.
Prerequisite(s): Reading level 7
Course Type: Academic

PHED 1346 Drug Use & Abuse 3 Credits (3 Lec, 0 Lab)
Study of the use, misuse and abuse of drugs and other harmful substances in today’s society. Physiological, sociological, pharmacological and psychological factors will be emphasized. This course will not satisfy one hour of physical education activity.
Course Type: Academic

PHED 2100 Varsity Conditioning I 1 Credit (0 Lec, 3 Lab)
This course provides students with opportunities to participate in varsity team sport conditioning.
Course Type: Academic

PHED 2101 Varsity Conditioning II 1 Credit (0 Lec, 3 Lab)
This course provides students with opportunities to participate in varsity team sport conditioning.
Course Type: Academic

PHED 2102 Varsity Conditioning III 1 Credit (0 Lec, 3 Lab)
This course provides students with opportunities to participate in varsity team sport conditioning.
Course Type: Academic

PHED 2103 Varsity Conditioning IV 1 Credit (0 Lec, 3 Lab)
This course provides students with opportunities to participate in varsity team sport conditioning.
Course Type: Academic

PHED 2106 Varsity Baseball I 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled baseball players who are competing on a collegiate level.
Course Type: Academic

PHED 2107 Varsity Baseball II 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled baseball players who are competing on a collegiate level.
Course Type: Academic

PHED 2108 Varsity Baseball III 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled baseball players who are competing on a collegiate level.
Course Type: Academic

PHED 2109 Varsity Baseball IV 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled baseball players who are competing on a collegiate level.
Course Type: Academic

PHED 2112 Varsity Basketball I 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled basketball players who are competing on a collegiate level.
Course Type: Academic

PHED 2113 Varsity Basketball II 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled basketball players who are competing on a collegiate level.
Course Type: Academic

PHED 2114 Varsity Basketball III 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled basketball players who are competing on a collegiate level.
Course Type: Academic

PHED 2115 Varsity Basketball IV 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled basketball players who are competing on a collegiate level.
Course Type: Academic

PHED 2118 Varsity Soccer I 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled soccer players who are competing on a collegiate level.
Course Type: Academic

PHED 2119 Varsity Soccer II 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled soccer players who are competing on a collegiate level.
Course Type: Academic

PHED 2120 Varsity Soccer III 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled soccer players who are competing on a collegiate level.
Course Type: Academic
PHED 2121 Varsity Soccer IV 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled soccer players who are competing on a collegiate level.
Course Type: Academic

PHED 2124 Varsity Softball I 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled softball players who are competing on a collegiate level.
Course Type: Academic

PHED 2125 Varsity Softball II 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled softball players who are competing on a collegiate level.
Course Type: Academic

PHED 2126 Varsity Softball III 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled softball players who are competing on a collegiate level.
Course Type: Academic

PHED 2127 Varsity Softball IV 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled softball players who are competing on a collegiate level.
Course Type: Academic

PHED 2130 Varsity Volleyball I 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled volleyball players who are competing on a collegiate level.
Course Type: Academic

PHED 2131 Varsity Volleyball II 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled volleyball players who are competing on a collegiate level.
Course Type: Academic

PHED 2132 Varsity Volleyball III 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled volleyball players who are competing on a collegiate level.
Course Type: Academic

PHED 2133 Varsity Volleyball IV 1 Credit (0 Lec, 3 Lab)
This course is designed for skilled volleyball players who are competing on a collegiate level.
Course Type: Academic

PHED 2140 Advanced Martial Arts 1 Credit (0 Lec, 3 Lab)
This course features advanced training in the physical and psychological aspects of street defense situations through vigorous flexibility, muscular endurance, and technical instruction and practice. Technical instruction will include martial art skills, combinations, and advanced training techniques. In addition, psychological strategies such as cognitive behavior modification, vision-motor behavior rehearsal and stress inoculation training will be taught.
Prerequisite(s): PHED 1140 or instructor approval
Course Type: Academic

PHED 2122 Care and Prevention of Athletic Injuries 3 Credits (3 Lec, 0 Lab)
This course covers prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, immediate and long-term care of injuries, and administration procedures in athletic training. This course will not satisfy one hour of physical education activity.
Course Type: Academic

PHED 19006 Aerobic Activities 0 Credits
PHED 19009 Martial Arts 0 Credits
PHED 19010 Exercise for Health & Fitness 0 Credits
PHED 19011 Yoga I 0 Credits
PHED 19014 Basketball 0 Credits
PHED 19015 Jogging 0 Credits
PHED 19016 Fitness Walking 0 Credits
PHED 19018 Bowling 0 Credits
PHED 35015 Basketball (Linked w/PHED1120) 4.8 Credits
PHED 39022 Camping (Linked w PHED 1144) 0 Credits
PHYSICAL THERAPIST ASST (PTHA)

PTHA 1201  The Profession of Physical Therapy  2 Credits  (2 Lec, 0 Lab)
This course covers the introduction to the profession of physical therapy and the role of the physical therapist assistant.
Prerequisite(s): Reading level 7, Math level 9, and Writing level 7
Course Type: Technical

PTHA 1305  Basic Patient Care Skills  3 Credits  (2 Lec, 3 Lab)
This course covers the application of basic patient handling, functional skills, communication, and selected data collection techniques.
Prerequisite(s): Reading level 7, Math level 9, and Writing level 7
Course Type: Technical

PTHA 1313  Functional Anatomy  3 Credits  (2 Lec, 4 Lab)
This course covers the relationship of the musculoskeletal and neuromuscular systems to normal and abnormal movement.
Prerequisite(s): Reading level 7, Math level 9, and Writing level 7
Course Type: Technical

PTHA 1321  Pathophysiology for the PTA  3 Credits  (3 Lec, 0 Lab)
This course covers the study of pathophysiology of diseases/conditions encountered in physical therapy.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1431, 2435, and 2239, and 1360, MATH 1314.
Course Type: Technical

PTHA 1360  Clinical I - PTA  3 Credits  (0 Lec, 12 Lab)
This course provides a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1321, and 2250.
Course Type: Technical

PTHA 1431  Physical Agents  4 Credits  (2 Lec, 4 Lab)
This course covers biophysical principles, physiological effects, efficacy, and application of physical agents.
Prerequisite(s): PTHA 1201, 1305, 1313, and 1321.
Course Type: Technical

PTHA 2201  Essentials of Data Collection  2 Credits  (1 Lec, 3 Lab)
This course covers data collection techniques used to assist in patient/client management
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1201, 1305, and 1313; BIOL 2404 or BIOL 2301, 2101, 2302, and 2102.
Course Type: Technical

PTHA 2205  Neurology  2 Credits  (2 Lec, 0 Lab)
This course is a study of neuroanatomy and neurophysiology as it relates to neurological conditions.
Prerequisite(s): Reading level 7, Writing level 7, Math level 9
Course Type: Technical

PTHA 2217  Issues in Health Care  2 Credits  (2 Lec, 0 Lab)
This course covers organizational patterns, administrative principles, legal and ethical issues in physical therapy, and preparation for licensure and employment.
Prerequisite(s): Reading level 7, Writing level 7, Math level 9
Course Type: Technical

PTHA 2239  Professional Issues  2 Credits  (2 Lec, 0 Lab)
This course covers the discussion of professional issues and behaviors related to clinical practice; preparation for transition into the workforce.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1321 and 2250
Course Type: Technical

PTHA 2409  Therapeutic Exercise  4 Credits  (3 Lec, 3 Lab)
This course covers concepts, principles, and application of techniques related to therapeutic exercise and functional training.
Prerequisite(s): PTHA 1201, 1305, 1313, and 1321.
Course Type: Technical

PTHA 2431  Management of Neurological Disorders  4 Credits  (3 Lec, 4 Lab)
This course is an advanced course integrating previously learned and new skills/techniques into the comprehensive rehabilitation of selected neurological disorders. Includes enhancement of professional development.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1321, and 2250.
Course Type: Technical

PTHA 2435  Rehabilitation Techniques  4 Credits  (3 Lec, 3 Lab)
This course covers the comprehensive rehabilitation of selected diseases and disorders.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 1321 and 2250.
Course Type: Technical

PTHA 2460  Clinical II - PTA  4 Credits  (0 Lec, 16 Lab)
This course provides a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 2431, 2435, 2239, and 1360, MATH 1314
Course Type: Technical

PTHA 2461  Clinical III - PTA  4 Credits  (0 Lec, 16 Lab)
This course provides a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): Reading level 7, Math level 9, Writing level 7, PTHA 2431, 2435, 2239, and 1360, MATH 1314.
Course Type: Technical

PTHA 35003  Yogic Approach to Stroke Rehab  1.5 Credits
PHYSICS (PHYS)

PHYS 1101 College Physics I (lab) 1 Credit (0 Lec, 3 Lab)
This course covers fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving.
Prerequisite(s): MATH 1314 or higher and Reading level 7;
Co-requisite(s): PHYS 1301
Course Type: Academic

PHYS 1102 College Physics II (lab) 1 Credit (0 Lec, 3 Lab)
This lab course activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.
Prerequisite(s): PHYS 1301/1101;
Co-requisite(s): PHYS 1302
Course Type: Academic

PHYS 1301 College Physics I (lecture) 3 Credits (3 Lec, 0 Lab)
This lecture course covers the fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving.
Prerequisite(s): MATH 1314 or higher and Reading level 7;
Co-requisite(s): PHYS 1101
Course Type: Academic

PHYS 1302 College Physics II (lecture) 3 Credits (3 Lec, 0 Lab)
This lecture course covers fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.
Prerequisite(s): PHYS 1301/1101;
Co-requisite(s): PHYS 1102
Course Type: Academic

PHYS 2125 University Physics I (lab) 1 Credit (0 Lec, 3 Lab)
This lab course covers experiments supporting theoretical principles presented in PHYS 2325 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports.
Prerequisite(s): PHYS 2325/2125, and MATH 2414;
Co-requisite(s): PHYS 2326
Course Type: Academic

PHYS 2325 University Physics I (lecture) 3 Credits (3 Lec, 0 Lab)
This lecture course covers the fundamental principles of physics, using calculus, for science, computer science, and engineering majors; the principles and applications of classical mechanics, including harmonic motion, physical systems and thermodynamics; and emphasis on problem-solving. It is designed to meet the needs of the pre-engineering student or physics major.
Prerequisite(s): MATH 2413 or higher and Reading level 7;
Co-requisite(s): PHYS 2125, MATH 2414
Course Type: Academic

PHYS 2326 University Physics II (lecture) 3 Credits (3 Lec, 0 Lab)
In this continuation of PHYS 2425, the topics covered include the principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics.
Prerequisite(s): PHYS 2325/2125 and MATH 2414;
Co-requisite(s): PHYS 2126
Course Type: Academic

PHYS 2389 Academic Cooperative 3 Credits (1 Lec, 8 Lab)
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.
Prerequisite(s): Eight hours of physics; Reading level 7, Writing level 7, Math level 8
Course Type: Academic
PLUMBER/PIPEFITTER (PFPB)

PFPB 1091 Pipefitting for Non-Pipefitters  1.6 Credits
The course focuses on teaching pipefitting skills, such as flange makeup, proper gasket identification, tubing fitting makeup to non-pipefitting personnel such as operators and maintenance personnel with basic knowledge of pipefitting. The course will focus on creating flanges up to two inch pipe, changing small bore valves, make up of joints of small bore threaded piping, and make up of tubing connections. Upon completion of the course the student will be able to identify flange types, valve types, replace small sections of threaded pipe, and make up tubing connections.

Course Type: Technical

PFPB 1408 Basic Pipefitting Skills  4 Credits (2 Lec, 4 Lab)
This course covers mathematical operations necessary to calculate laying lengths of pipe fittings for fabrication. Identification and use of hand tools and power tools. Identification of pipe, pipe fittings, flanges, and fasteners used in the trade.
Course Type: Technical

PFPB 1443 Pipefitting Fabrication and Blueprint Reading  4 Credits (2 Lec, 4 Lab)
This course is a continuation of basic pipefitting skills including fabrication, rigging, pipe hangers and supports, blueprint reading, standards and specifications, and trade math.
Course Type: Technical

PFPB 2432 Advanced Pipefitting Standards, Specifications, and Installation  4 Credits (2 Lec, 4 Lab)
This course covers skill development in motorized equipment, above-ground pipe installation valves, field routing and vessel trim, spring can supports, testing piping systems and equipment, basic plumbing, planning work activities, and Non-Destructive Testing (NDT).
Prerequisite(s): PFPB 1408, PFPB 1443

Course Type: Technical

PFPB 2433 Pipefitting: Advanced Fabrication and Installation  4 Credits (2 Lec, 4 Lab)
This course covers advanced pipe fabrication and pipe alignment for rotating equipment. Includes identifying, describing, applying, and maintaining steam traps, in-line specialties, special piping, hot taps, and valves.
Prerequisite(s): PFPB 1408, PFPB 1443

Course Type: Technical

PFPB 41001 Basic Pipefitting: Installation  3.2-12.8 Credits
PFPB 41003 Basic Plumbing Skills  3.2-8 Credits
PFPB 41007 Introduction to Pipefitting  3.2-12.8 Credits
PFPB 41011 Plumbing Maintenance Skills  1.6-4.8 Credits
PFPB 41013 Introduction to the Plumbing Trade  6.4-12.8 Credits
PFPB 41019 Commercial Plumbing I  3.2-9.6 Credits
PFPB 41023 Plumbing Codes I  3.2-9.6 Credits
PFPB 41025 Mechanics of Plumbing  3.2-9.6 Credits
PFPB 41031 Inst/Repr-PotWatSys-Plumbing  3.2-12.8 Credits
PFPB 41041 Basic Pipefitting: Installation  6.4-12.8 Credits
PFPB 41043 Pipefitting Fabrication and Installation  3.2-12.8 Credits
PFPB 41047 Backflow Prevention  3.2-9.6 Credits
PFPB 41051 Commercial and Industrial Gas  3.2-9.6 Credits
PFPB 41053 Commercial Plumbing II  3.2-9.6 Credits
PFPB 41055 Industrial Plumbing  3.2-9.6 Credits
PFPB 41057 Plumbing Codes II  3.2-9.6 Credits
PFPB 41091 Special Topics in Plumber and Pipefitter  0.7-11.2 Credits
PFPB 42000 Prof. Development: Plumbing  2.4 Credits
PFPB 42031 Advanced Technologies and Specifications  3.2-12.8 Credits
PFPB 42032 Pipefitting Standards, Specifications  3.2-12.8 Credits
PFPB 42033 Pipefitting, Advanced Fabrication  3.2-12.8 Credits
PFPB 42035 Commercial and Industrial Cont  3.2-9.6 Credits
PFPB 42039 Commercial and Industrial System  3.2-9.6 Credits
PFPB 42040 Medical Gas  3.2-9.6 Credits
PFPB 55000 NCCER Pipefitting Level 1  12 Credits
Prerequisite(s): None Note: Personal protective equipment to be purchased at student's expense. Instruction in the orientation of the trade, pipefitting hand and power tools, oxyfuel cutting, ladders and scaffolds, and motorized equipment.

PFPB 55001 Pipefitting Fabrication & Blueprint Reading: Pipe 2B  8 Credits
Prerequisite(s): NCCER Pipefitting 1 and 2A. Note: Textbook Required. PPE to be purchased at student expense. Instruction in socket and butt weld pipe fabrication and underground pipe installation.

PFPB 55002 NCCER Pipefitting Level 3  12 Credits
Prerequisite(s): NCCER Pipefitting 1 and 2 Note: Personal protective equipment to be purchased at student's expense. This course prepares the trainee for certification in Level 3 NCCER Pipefitting Certification. Including skill development in rigging practices and equipment, standards and specs, advanced trade math, motorized equipment and aboveground pipe installation.

PFPB 55003 Basic Plumbing Skills: 1B  7.2 Credits
Development of skills and knowledge required to install drains, sanitary sewers, water and natural gas supply lines, and fixtures commonly used in residential and light commercial buildings and facilities.
PFPB 55004 Basic Pipefitting: Installation & Rigging: Plumbing 2A 7.8 Credits
Fundamentals of threading pipe, calculating threaded fitting take-off and installation. Includes valve identification and installation, basic rigging applications and identification of rigging hardware, safety procedures, trade math applications, and process pipe blueprint reading.

PFPB 55005 Plumbing Standards Water Supplies: Plumbing 2B 7.2 Credits
Study the installation of water service from the installation of valves and faucets to connecting to water mains. Covers both residential and commercial settings.

PFPB 55006 Installation and Repair of Potable Water Systems: Plumbing 3B 7.2 Credits
Plumbing of potable water systems according to local plumbing codes. Includes methods of filtering and softening water systems.

PFPB 55007 NCER Pipefitting Level 2 12 Credits
Prerequisite(s): NCER Pipefitting 1 Note: Personal protective equipment to be purchased at student’s expense. This course prepares the trainee for certification in Level 2 NCER Pipefitting Certification. Students will learn to explain the procedures of identifying and installing valves, piping systems, drawing and detail sheets, pipefitting trade math, threaded pipe fabrication and excavations.

PFPB 55008 Pipefitting Installation & Testing: Pipefitting 3B 6.4 Credits
Continuation of installation practices with trade math, pipe hangers/supports, and testing piping systems.

PFPB 55009 NCER Pipefitting Level 4 12 Credits
Prerequisite(s): NCER Pipefitting 1, 2 and 3 Note: Personal protective equipment to be purchased at student’s expense. This course prepares the trainee for certification in Level 4 NCER Pipefitting certification. Covers the skills needed for advanced blueprint reading, hot taps, maintaining valves and supervisory roles.

PFPB 55010 NCER Pipefitting 4B 8 Credits
Prerequisite(s): NCER Pipefitting 1, 2A, 2B, 3A, 3B, 4A. Note: Textbook Required. PPE to be purchased at students expense. Covers the skills needed for advanced pipe fabrication, steam traps, and special piping.

PFPB 55011 Pluming 1: 1A 5.2 Credits
Students will learn the basic principles of mechanics and physical science used in the plumbing industry.

PFPB 55012 Pluming 2: 2A 8.3 Credits
Covers the mathematics, reading of drawings installation devices for plumbing installations.

PFPB 55013 Pluming 1: 1B 5.2 Credits
Students will review basic mathematical concepts used in plumbing, learn to use the different types of plumbing drawings, and study pipe and fittings made of plastic, copper, cast-iron, and carbon steel.

PFPB 55014 NCER Pipefitting 3B 8 Credits
Prerequisite(s): NCER Pipefitting 1, 2A, 2B, 3A. Note: Textbook Required. PPE to be purchased at students expense. Skill development in field routing and vessel trim, pipe hangers and supports, testing piping systems and equipment, stress relieving and aligning, and in-line specialties.

PFPB 55015 Pluming 2: 2B 8.3 Credits
Covers commercial drawings fuels systems and servicing fixtures.

PFPB 55016 Pluming 3: 3A 7.3 Credits
Covers the installation of fixtures and components used in potable water systems.

PFPB 55017 Pluming III: 3B 7.3 Credits
Covers the types of venting, sizing of waste systems and installation of sewage pumps.

PFPB 55018 Basic Pipefitting Skills 9.6 Credits
Prerequisite(s): None This course covers mathematical operations necessary to calculate laying lengths of pipe fittings for fabrication. It includes identification and use of hand tools and power tools and identification of pipe, pipe fittings, flanges and fasteners used in the trade. (PFPB 1308)

PFPB 55019 Pipefitting: Advanced Fabrication and Installation 9.6 Credits
Prerequisite(s): PFPB 1308 and PFPB 1343 This course focuses on advanced pipe fabrication and pipe alignment for rotating equipment. It includes identifying, describing, applying, and maintaining stream traps, in-line specialties, special piping, hot taps and valves. (PFPB 2333)

PFPB 55020 Advanced Pipefitting Standards, Specifications, and Installation 9.6 Credits
Prerequisite(s): PFPB 1308 and PFPB 1343 The course covers skill development in motorized equipment, above-ground pipe installation valves, field routing and vessel trim, spring can supports, testing piping systems and equipment, basic plumbing, planning work activities and non-destructive testing (NDT). (PFPB 2332)

PFPB 55021 Pipefitting Fabrication & Blueprint Reading 9.6 Credits
Prerequisite(s): PFPB 1308 This course is a continuation of pipe fabrication, rigging, pipe hangers and supports, blueprint reading, standards and specifications and trade math. (PFPB 1343)

PFPB 55022 NCER Pipefitting Level 1 7.2 Credits
Prerequisite(s): None Note: Textbook Required. PPE to be purchased at the students expense. This course prepares the trainee for certification in level 1 NCER Pipefitting Certification, including instruction in to the orientation of the trade, pipefitting hand and power tools, oxyfuel cutting, ladders and scaffolds, and motorized equipment.

PFPB 55023 Pipefitting for Non-Pipefitters 1.6 Credits
The course focuses on teaching pipefitting skills, such as flange makeup, proper gasket identification, tubing fitting makeup to non-pipefitting personnel such as operators and maintenance personnel with basic knowledge of pipefitting. The course will focus on creating flanges up to two inch pipe, changing small bore valves, make up of joints of small bore threaded pipe, and make up of tubing connections. Upon completion of the course the student will be able to identify flange types, valve types, replace small sections of threaded pipe, and make up tubing connections.

PFPB 97007 Pipefitting 4 3.2-12.8 Credits
PROCESS TECHNOLOGY (CTEC)

CTEC 2487 Internship - Chemical Technology/Technician 4 Credits (0 Lec, 24 Lab)
This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer.
Prerequisite(s): Reading level 7, Writing level 7, Math level 6

Course Type: Technical
PROCESS TECHNOLOGY (PTAC)

PTAC 1302 Introduction to Process Technology 3 Credits (3 Lec, 0 Lab)
This is an introduction overview to the various processing industries.
Prerequisite(s): Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 1310 Process Technology I - Equipment 3 Credits (2 Lec, 4 Lab)
This course is an introduction to the use of common processing equipment. Prerequisite or
Prerequisite(s): Reading level 7, Writing level 7, Math level 6

Co-requisite(s): PTAC 1302;

Course Type: Technical

PTAC 1332 Process Instrumentation I 3 Credits (3 Lec, 1 Lab)
This is a study of instruments and control systems used in the process industry including terminology, process variables, symbology, control loops, and basic troubleshooting. Prerequisite or
Prerequisite(s): TECM 1301 or higher, Reading level 7, Writing level 7, Math level 6

Co-requisite(s): PTAC 1302;

Course Type: Technical

PTAC 2314 Principles of Quality 3 Credits (3 Lec, 0 Lab)
In this study of the background and application of quality concepts, topics include team skills, quality tools, statistics, economics and continuous improvement. As part of the course, students use statistical process control to collect, organize, and analyze data; describe the principles of quality control; demonstrate team skills; and apply quality tools to process systems.
Prerequisite(s): Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 2420 Process Technology II-Systems 4 Credits (3 Lec, 3 Lab)
This is a study of the various process systems, including related scientific principles. As a part of this course, students describe the purpose and function of common process systems; and operate each process system.
Prerequisite(s): PTAC 1310 and Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 2420 Process Technology II - Systems 4 Credits (3 Lec, 3 Lab)
This is a study of the various process systems, including related scientific principles. As a part of this course, students describe the purpose and function of common process systems; and operate each process system.
Prerequisite(s): PTAC 1310 and Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 24246 Process Troubleshooting 4 Credits (3 Lec, 3 Lab)
This course offers instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Prerequisite(s): PTAC 1332 and PTAC 2420, Reading level 7, Writing level 7, Math level 6

Course Type: Technical

PTAC 41002 Introduction To Process Techno 4.8-6.4 Credits
PTAC 41003 Chemical Process Technician 6.4-11.2 Credits
PTAC 41008 Safety, Health, and Environmen 4.8-9.6 Credits
PTAC 41015 Process Equipment 0.8-4.8 Credits
PTAC 41018 Petroleum or Chemical Process 1.6-4.8 Credits
PTAC 41050 Industrial Economics 4.8-6.4 Credits
PTAC 41052 Process Instrumentation I 4.8-9.6 Credits
PTAC 41091 Special Topics in Chemical Tec 0.7-11.2 Credits
PTAC 42002 Process Sampling and Analysis 4.8-12.8 Credits
PTAC 42010 Process Technology I - Equipme 8-12.8 Credits
PTAC 42014 Quality 4.8-6.4 Credits
PTAC 42020 Process Technology II - System 8-14.4 Credits
PTAC 42034 Industrial Processes 4.8-9.6 Credits
PTAC 42036 Process Instrumentation II 4.8-9.6 Credits
PTAC 42038 Process Technology III - Opera 8-12.8 Credits
PTAC 42046 Process Troubleshooting 4.8-9.6 Credits
PTAC 42048 Safety, Health, and Environmen 4.8-9.6 Credits
PTAC 49001 Process Technology I Equipment 2.4 Credits
PTAC 49002 Process Instrumentation I 0.1-3.6 Credits
PTAC 55000 Introduction to Process Technology 4.8 Credits
Relate an overview of a typical process plant; identify process equipment; state the purpose of equipment; describe safety, health, and environmental components; and describe the roles, responsibilities, and work environment. (PTAC 1302)

PTAC 55001 Fundamentals of Process Troubleshooting 1.6 Credits
Today's typical process operator controls an investment in plant and equipment that runs into the tens of millions of dollars; raw materials worth as much as a million dollars a day; the safety of hundreds of people working and living around the plant. But most operators aren't well schooled in troubleshooting process problems - and the consequences of failed troubleshooting have been costly - and fatal. This course uses computer simulation of case studies that teach proven troubleshooting techniques that are applied to real-life situations

PTAC 55002 Pipeline 101 3.2 Credits
Instruction in reservoir usage, fluid composition, prospect definition, location of hydrocarbons, extraction and separation processes, problem solving, and proper disposal of waste products.

PTAC 55003 Fast Track Process Equipment-Basic 0.8 Credits
Covers the function and purpose of each type of major equipment normally found in process operations and troubleshooting techniques. Designed as an 8 hour training session for new hires and as a refresher for incumbents.

PTAC 55004 Process Operations-Basic 4 Credits
An overview of process technology equipment including purpose, components, operation, and the process technician's role for operating and troubleshooting the equipment.
PTAC 55005 Pipeline 101 1.2 Credits
This class will explain pipeline operations and cover safety, health, and environmental issues in the field.

PTAC 55006 New Operator Training 4 Credits
An overview of process technology equipment including purpose, components, operation, and the process technician's role for operating and troubleshooting the equipment.

PTAC 55007 Process Troubleshooting 9.6 Credits
Prerequisite(s): PTAC 1332 and PTAC 2420, Reading level 7, Writing level 7, Math level 7. Textbook Required. This course offers instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. (PTAC 2446)

PTAC 55008 New Operator Training 2.1 Credits
An overview of process technology equipment including purpose, components, operation, and the process technician's role for operating and troubleshooting the equipment.

PTAC 55009 New Operator Training 6.4 Credits
Instruction covering how to read and interpret the P&ID equipment, computerized process control using the Distillation Expert Trainer (DEXTER) and the Simtronics simulator. Students will also learn to troubleshoot the glycol unit.

PTAC 55010 New Operator Training 0.8 Credits
Students will learn to identify ways of working safely with production equipment and personal protective gear to ensure the safety and success of work teams. They will be able to describe a variety of equipment and their functions in relation to New Operator training.

PTAC 55011 New Operator Training-Fundamentals 1.6 Credits
Students will study and perform start-up, lineout, shut-down operations on a process loop and troubleshoot operational problems as they occur.

PTAC 55012 Dow - Process Operations & Equipment 3.2 Credits
Students will be able to identify the components and their functions in a process control system and perform start-up, shut-down operations while troubleshooting process upsets.

PTAC 55013 Process Operations - Introduction 7.2 Credits
Students will be able to identify typical process equipment, process equipment and process operations.

PTAC 55014 Process Operations & Equipment - Core 3.2 Credits
Prerequisite(s): None Note: Materials Provided During the four-day training session, students shall receive approximately 16 hours of training on the glycol distillation unit which consists of unit safety issues, start-up/shut-down procedures, field operations, control board operations and troubleshooting the unit while in operation. The remaining course time includes classroom lecture/discussions on chemical process equipment and systems, reading glycol unit PID's, locating/identifying instrumentation and control equipment, and performing tasks on the simulator.

PTAC 55015 Reactors & Distillation Fundamentals 1.6 Credits
Students will learn the principles of thermodynamics, fluid flow, the function of batch and continuous reactors, distillation systems and troubleshooting distillation unit problems.

PTAC 55017 Process Technology I - Fast Track 7.2 Credits
Students learn plant process and utility systems, equipment operations, reading P&ID’s and safety/environmental factors of process operations.

PTAC 55018 Process Technology II - Fast Track 8.8 Credits
Students learn to identify process equipment, use proper terminology and basic functions of process equipment.

PTAC 55019 Stationary Engineer Exam Prep 1.6 Credits
Provides training in boiler operations, safety, thermodynamics, instrumentation and control systems to prepare chemical plant operations personnel to qualify for licensure as a boiler stationary engineer.

PTAC 55020 Process Troubleshooting-Basic 3.2 Credits
Instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning.

PTAC 55021 Process Troubleshooting-Advanced 4 Credits
Students develop in-depth skills in process troubleshooting techniques including correcting problems at start-up, shutdown and abnormal operating situations.

PTAC 55022 Process Operator-Fundamentals 12 Credits
Covers the procedures, responsibilities, processes, equipment, and systems for the safe operation of process systems.

PTAC 55023 Distributed Control System (DCS) Operator Training 4 Credits
Students will be able to identify the components and their functions in a process control system and perform start-up, shut-down procedures while troubleshooting process upsets.

PTAC 55024 Process Operator-Core 2.4 Credits
Students will be able to perform start-up, shut-down procedures while troubleshooting process upsets.

PTAC 55025 Refresher Troubleshooting for Operators 0.8 Credits
This course is designed for incumbent operators with significant experience that review the troubleshooting method and focus on the communication process during abnormal situations to enable the trainee to be quicker and more accurate.

PTAC 55026 Safety, Health & Environment I 4.8 Credits
Prerequisite(s): Reading level 7, Writing level 7, Math level 7. This course is an overview of safety, health and environmental issues in the performance of all job tasks. (PTAC 1308)

PTAC 55027 Principles of Quality 4.8 Credits
Prerequisite(s): Reading level 7, Writing level 7, Math level 7. No Textbook Required. Study of the background and application of quality concepts, including team skills, quality tools, statistics, economics, and continuous improvement. As part of this course, students use statistical process control to collect, organize, and analyze data; describe the principles of quality control; demonstrate team skills; and apply quality tools to process systems. (PTAC 2314)

PTAC 55028 Process Troubleshooting-24 Hours 2.4 Credits
Topics address current events, skills, knowledge, and/or attitudes and behaviors pertinent to Process Troubleshooting.

PTAC 55029 Process Operations - Intermediate 1.6 Credits
This course is a continuation of Process Operations Basic. Trainees will use what-if scenarios to learn to perform start-up, shut-down procedures while troubleshooting process upsets. Trainees develop in-depth skills in process operations including correcting problems at start-up, shutdown and abnormal operating situations.

PTAC 55030 Process Equipment Basic 0.8 Credits
This course covers equipment and systems commonly found in petrochemical processing facilities.
PTAC 55031  Distributed Control Systems Overview  3.2 Credits
This course is a general overview of the Emerson Delta V Distributed Control System used in plant automation. Topics include hardware, firmware, software, configuration, communications and networking systems required to implement a distributed control strategy.

PTAC 55032  Industrial Interlock (IEC)  1.6 Credits
Students develop in-depth skills in process troubleshooting techniques including correcting problems at start-up, shutdown and abnormal operating situations.

PTAC 55033  Process Operations Troubleshooting  1.6 Credits
Instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning.

PTAC 55034  Lubrizol-Process Operations  4.8 Credits
Students will study and perform DCS system start-up, shut-down and resolve operational problems in simulated process loop systems.

PTAC 55035  Distillation  3 Credits
Define and use terminology; identify and describe components and basic functions of distillation theory.

PTAC 55036  New Operator Training - 120hrs  12 Credits
Students will learn to identify ways of working safely with production equipment and personal protective gear to ensure the safety and success of work teams. They will be able to describe a variety of equipment and their functions in relation to New Operator training.

PTAC 55037  Distillation - 8hr  0.8 Credits
Overview of the use of common process equipment. Students will define and use terminology; identify and describe components and basic functions of process equipment.

PTAC 55038  Distillation - 8hr  0.8 Credits
Overview of the use of common process equipment. Students will define and use terminology; identify and describe components and basic functions of process equipment.

PTAC 55039  Basic Process Operations  4 Credits
This program is designed for new-hire operators with little or no exposure to process operations. Students will learn to identify the types of equipment commonly found in process operations and their intended purpose, define and use terminology commonly used in plant and refinery operations, read and interpret P&IDs, perform system start-up and shut-down procedures, and respond to upset and alarm conditions.

PTAC 55040  Basic SMASH Training  1.6 Credits
Note: Materials provided This training will teach learners how to operate the ISRA Surface Vision Inspection System located on the production line. Upon successful completion of the course, they will be able to: Describe the hardware used for vision inspection. Explain characteristics of the video signal. Perform camra bank setup and camra coordinates. Adjust inspection settings. Set up alarm and graph parameters. Navigate the preferences menu. Understand system and security options.

PTAC 55041  Basic Process Equipment: Pumps & Valves  1.6 Credits
This program is designed for new hires or as a refresher training for incumbent workers, and covers equipment and systems commonly found in petrochemical processing facilities. The curriculum includes pre-and post-testing and hands-on experiences.

PTAC 55042  Advanced SMASH Training  1.6 Credits
This training will introduce learners how to advanced training topics regarding the operation of the ISRA Surface Vision Inspection System. Upon successful completion of the course, they will be able to: Operate the Quick Teach Classifier; Understand Roll Segments; Configure Edge Analyzer, Streak Detection; Perform Data-mining.

PTAC 55043  Process Pumps and Valves  0.8 Credits
This program is designed for new hires or as refresher training for incumbent workers, and covers equipment and systems commonly found in petrochemical processing facilities. The curriculum includes pre-and post-testing and hands-on experiences. This course can be modified to fit a particular industry or process.

PTAC 55044  Process Technology I - Equipment  0.8 Credits
In this course trainees will receive an overview of process technology equipment including components, their purpose, operation, and the process technician's role for operating and troubleshooting the equipment will study equipment and systems commonly found in chemical process/refinery operations.

PTAC 55045  DCS Operator Training  1.6 Credits
This course is an introduction to Distributed Control Systems for control room operators. It focuses on how to use the DCS; how to start-up and shutdown control schemes and how to troubleshoot upset conditions.

PTAC 55046  Process Technology III - Operations  3.2 Credits
This course emphasizes activities associated with the hands-on operations of process equipment. Students will be able to identify process and utility systems, components and their purposes, and describe the safety and environmental components of a process system. Students will startup and shutdown a processing unit, transfer fluids from vessels, trace lines, and control the unit(s) via a distributed control system.
PROCESS TECHNOLOGY (PTRT)

PTRT 1301  Introduction to Petroleum Industry  3 Credits  (3 Lec, 0 Lab)
This is an introduction to the various aspects of petroleum industry including equipment, systems, instrumentation, operations, and the various scientific principles.
Prerequisite(s): Reading level 7, Writing level 7, Math level 8

Course Type: Technical

PTRT 55000  Seals, Bearings and Lube  1.6 Credits
This course will provide trainees with an understanding of pumps, seals, bearings, and lubrication in an industrial setting.
PSYCHOLOGY (PSYC)

PSYC 1300 Learning Framework 3 Credits (3 Lec, 0 Lab)
The purpose of PSYC 1300/EDUC 1300 is to enable you to develop effective academic behaviors for college success. The course includes a balance between the research and theory in the psychology of learning, cognition, and motivation and how to apply what you learn to becoming successful in a college setting. You will understand the factors that affect learning and how to apply what you learn to the development of successful learning strategies. You will use assessment instruments, such as learning inventories, to help you identify your own strengths and weaknesses as a strategic learner. As you develop these skills, you should be able to continually draw from the theoretical models and apply this to your courses and to your life.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

PSYC 2301 General Psychology 3 Credits (3 Lec, 0 Lab)
This course is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

PSYC 2306 Human Sexuality 3 Credits (3 Lec, 0 Lab)
This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.
Prerequisite(s): SOCI 1301 or PSYC 2301, Reading level 7, Writing level 7
Course Type: Academic

PSYC 2308 Child Psychology 3 Credits (3 Lec, 0 Lab)
This course will address psychological development from conception through middle childhood with references to physical, cognitive, social and personality changes. Students will examine the interplay of biological factors, human interaction, social structures and cultural forces in development.
Prerequisite(s): PSYC 2301, Reading level 7, Writing level 7
Course Type: Academic

PSYC 2314 Lifespan Growth and Development 3 Credits (3 Lec, 0 Lab)
This course is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death.
Prerequisite(s): PSYC 2301, Reading level 7, Writing level 7
Course Type: Academic

PSYC 2315 Psychology of Adjustment 3 Credits (3 Lec, 0 Lab)
This course is the study of the processes involved in adjustment of individuals to their personal and social environments. This course is designed to study the basic principles and various theories of effective behavior which underlie personal adjustment. This course probes the human dilemma, the personal and social context of behavior, the search for values and methods for personal growth.
Prerequisite(s): PSYC 2301, Reading level 7, Writing level 7
Course Type: Academic

PSYC 2317 Elementary Statistics 3 Credits (3 Lec, 0 Lab)
This course is a study of the basic statistical concepts and techniques of descriptive and inferential statistics as used in psychological and educational research. Included are frequency distributions and graphs, measures of central tendency and variability, interpretation of individual scores, correlations and prediction, the logic of inferential statistics, t-test, analysis of variance, and some nonparametric statistics including chi square.
Prerequisite(s): PSYC 2301, Reading level 7, and Writing level 7
Course Type: Academic

PSYC 2319 Introduction to Social Psychology 3 Credits (3 Lec, 0 Lab)
This course studies behavior of the individual in the group. The course includes group interaction, leadership, motivation, problems in attitudes, prejudice, prosocial behavior, aggression, love, environmental influences on behavior and gender identity and sexual behavior.
Prerequisite(s): PSYC 2301, Reading level 7, and Writing level 7
Course Type: Academic
READING (READ)

READ 0110 Developmental Reading (NCBO)  1 Credit  (1 Lec, 0 Lab)
This course is a study of the fundamental reading skills to develop comprehension, vocabulary, and rate.
Course Type: College Prep

READ 0308 Basic Reading Skills  3 Credits  (3 Lec, 1 Lab)
This course is designed for the development of reading and higher order thinking skills necessary for college readiness. Following assessment, the student will be taught word recognition, basic vocabulary skills, and literal comprehension, such as main idea and details. This course is not applicable to any degree.
Prerequisite(s): Reading level 2
Course Type: College Prep

READ 0309 Reading Comprehension  3 Credits  (3 Lec, 1 Lab)
This intermediate reading course is designed to continue the sequential process of reading with emphasis on reading comprehension and vocabulary development. Selected readings will be used for intensive work in literal and inferential meanings. This course is not applicable to any degree.
Prerequisite(s): a grade of C or above in READ 0308 or reading score within defined range.
Course Type: College Prep

READ 0310 College Reading Techniques  3 Credits  (3 Lec, 0 Lab)
This course is designed for the development of reading skills beyond the basic skills on an individual basis. Emphasis is placed on further development of comprehension, vocabulary, and interpretation of nonfiction articles and reading speed. This course is not applicable to any degree.
Prerequisite(s): a grade of C or above in READ 0309 or reading score within defined range.
Course Type: College Prep

READ 0311 Speed Reading  3 Credits  (3 Lec, 0 Lab)
This course is designed primarily for students who read at or above the 12th grade reading level. Emphasis is placed on increased comprehension, reading speed, critical reading, vocabulary expansion and reading flexibility. This course is for personal enrichment; it is not part of our sequential reading program nor does it transfer as credit toward any degree.
Prerequisite(s): Reading level 7
Course Type: College Prep
REAL ESTATE (RELE)

RELE 1201 Principles of Real Estate I 2 Credits (2 Lec, 0 Lab)
This is a beginning overview of licensing as a broker or salesperson. It includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance, and regulations, closing procedures, and real estate mathematics. It covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. It fulfills at least 30 to 60 hours of required instruction for salesperson license.
Course Type: Technical

RELE 1211 Law of Contracts 2 Credits (2 Lec, 0 Lab)
This course focuses on elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms, and owner disclosure requirements.
Course Type: Technical

RELE 1238 Principles of Real Estate II 2 Credits (2 Lec, 0 Lab)
This is a continuing overview of licensing as a broker or salesperson. It includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances or liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. It covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. It fulfills at least 30 to 60 hours of required instruction for salesperson license.
Course Type: Technical

RELE 1300 Contract Forms and Addenda 3 Credits (3 Lec, 0 Lab)
This course is the study of promulgated contract forms, which shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use forms and case studies involving use of forms.
Course Type: Technical

RELE 1303 Real Estate Appraisal 3 Credits (3 Lec, 0 Lab)
This is the study of the central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. It is recommended that the student should take or have taken RELE 1201.
Course Type: Technical

RELE 1307 Real Estate Investments 3 Credits (3 Lec, 0 Lab)
This is a study of the characteristics of real estate investments. This includes techniques of investment analysis, time-valued money, discounted and non-discounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. It is recommended that the student should take or have taken RELE 1201.
Course Type: Technical

RELE 1315 Property Management 3 Credits (3 Lec, 0 Lab)
This course explains the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. It is recommended that you take or have taken RELE 1201.
Course Type: Technical

RELE 1319 Real Estate Finance 3 Credits (3 Lec, 0 Lab)
This is the study of monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency.
Course Type: Technical

RELE 1321 Real Estate Marketing 3 Credits (3 Lec, 0 Lab)
The study of real estate professionalism and ethics, characteristics of successful salespersons, time management, psychology of marketing, listing procedures, advertising, negotiation and closing financing; and the Deceptive Trade Practices-Consumer Protection Act. It is recommended that you take or have taken RELE 1201.
Course Type: Technical

RELE 1323 Real Estate Computer Application 3 Credits (2 Lec, 2 Lab)
This course is a study of the availability of technology, especially software, and its ability to help a real estate agent become more productive. It includes data base mapping interest, software application, and the use and application of social media.
Course Type: Technical

RELE 1325 Real Estate Mathematics 3 Credits (3 Lec, 0 Lab)
This course covers basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statement.
Course Type: Technical

RELE 2301 Law of Agency 3 Credits (3 Lec, 0 Lab)
This is a study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying representation procedures, and the disclosure of an agency.
Course Type: Technical

RELE 2331 Real Estate Brokerage 3 Credits (3 Lec, 0 Lab)
This course is a study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. It is recommended that the student should take or have taken RELE 1201.
Course Type: Technical

RELE 2366 Real Estate Practicum I 3 Credits (0 Lec, 21 Lab)
This is a basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be paid or unpaid learning experience. The College with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study.
Prerequisite(s): must have a job (paid or unpaid) working in a real estate related position at least 20 hours per week. Students may not be enrolled in more than one real estate practicum class during the same semester.
Course Type: Technical
RELE 2367  Real Estate Practicum 2  3 Credits  (0 Lec, 21 Lab)
This is a basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. The College with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. Prerequisite: RELE 2366
Prerequisite(s): must have a job (paid or unpaid) working in a real estate related position at least 20 hours per week. Students may not be enrolled in more than one real estate practicum class during the same semester.  
RELE 2366

Course Type: Technical
RELE 55001 Law of Agency 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. A study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent’s authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency. (RELE 2301)

RELE 55002 Real Estate Mathematics 4.8 Credits
Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements. (RELE 1325)

RELE 55003 Principles of Real Estate I 3.2 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. Overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. (RELE 1001)

RELE 55004 Law of Contracts 4.8 Credits
This course covers real estate contracts/principles involved in promulgating contracts. Included are contracts for VA, FHA, conventional, and owner financed. (RELE 1311)

RELE 55005 Real Estate Brokerage 4.8 Credits
Study of the law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. (RELE 2331)

RELE 55006 Real Estate Marketing 4.8 Credits
This course focuses on real estate professionalism and ethics, characteristics of successful salespersons, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practice Act. (RELE 1321)

RELE 55007 Real Estate Appraisal 4.8 Credits
This course focuses on the central purposes and functions of an appraisal; social and economic determinants of value; appraisal case studies; cost, market data and income approaches to value estimates; final correlations; and reporting. (RELE 1303)

RELE 55008 Practicum-Real Estate 33.6 Credits
A basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. (RELE 2367)

RELE 55009 Real Estate Finance 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. This course provides an overview of monetary systems; primary and secondary money markets; sources of mortgage loans; federal government programs; loan applications, processes and procedures; closing costs; alternative financial instruments; equal credit opportunity laws affecting mortgage lending; and the State Housing Agency. (RELE 1319)

RELE 55010 Contract Forms and Addenda 4.8 Credits
Note: Additional distance learning fees for online or hybrid courses will be assessed at time of payment. The study of promulgated contract forms, which shall include but is not limited to unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use forms and case studies involving use of forms. (RELE 1300)
RESPIRATORY CARE (RSPT)

RSPT 1101  Introduction to Respiratory Care  1 Credit  (1 Lec, 0 Lab)
This course is an introduction to the field of respiratory care.
Course Type: Technical

RSPT 1160  Respiratory Care Clinical  1 Credit  (0 Lec, 6 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Co-requisite(s): RSPT 1329
Course Type: Technical

RSPT 1225  Respiratory Care Sciences  2 Credits  (2 Lec, 0 Lab)
This course is a study of physics, mathematics, and chemistry as related to respiratory care.
Prerequisite(s): MATH 1314 or MATH 1332 or MATH 1342 or a higher level math
Course Type: Technical

RSPT 1267  Respiratory Care Practicum I  2 Credits  (0 Lec, 16 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. The course provides the student with the opportunity to learn about the hospital environment and the Respiratory Care department. It includes basic cardiopulmonary resuscitation, basic patient care skills, patient assessment, gas and aerosol therapy, hyperinflation therapy, chest physiotherapy, airway care, and arterial blood gas sampling and analysis.
Prerequisite(s): HPRS 1106, RSPT 1325, 1340, 1429;
Co-requisite(s): RSPT 1431
Course Type: Technical

RSPT 1325  Respiratory Care Sciences  3 Credits  (3 Lec, 0 Lab)
This course is a study of physics, mathematics, and chemistry as related to respiratory care.
Prerequisite(s): MATH 1314 OR TECM 1301 or a higher level math
Course Type: Technical

RSPT 1329  Respiratory Care Fundamentals I  3 Credits  (2 Lec, 3 Lab)
This course is an introduction to respiratory care fundamentals.
Course Type: Technical

RSPT 1331  Respiratory Care Fundamentals II  3 Credits  (2 Lec, 3 Lab)
This course provides continued development of knowledge and skills for respiratory care.
Prerequisite(s): RSPT 1225, 1340, and 1329;
Co-requisite(s): RSPT 1360
Course Type: Technical

RSPT 1340  Advanced Cardiopulmonary Anatomy and Physiology  3 Credits  (3 Lec, 1 Lab)
This course provides an advanced presentation of anatomy and physiology of the cardiovascular and pulmonary system.
Prerequisite(s): BIOL 2404 or BIOL 2301/2101 and 2302/2102
Course Type: Technical

RSPT 1360  Respiratory Care Clinical I  3 Credits  (0 Lec, 15 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): RSPT 1225, 1340, 1329;
Co-requisite(s): RSPT 1331
Course Type: Technical

RSPT 1429  Respiratory Care Fundamentals I  4 Credits  (3 Lec, 3 Lab)
This course is an introduction to respiratory care fundamentals.
Course Type: Technical

RSPT 1431  Respiratory Care Fundamentals II  4 Credits  (3 Lec, 3 Lab)
This course provides continued development of knowledge and skills for respiratory care.
Prerequisite(s): RSPT 1325, 1340, and 1429;
Co-requisite(s): RSPT 1460
Course Type: Technical

RSPT 1460  Respiratory Care Clinical I  4 Credits  (0 Lec, 16 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): RSPT 1325, 1340, 1429;
Co-requisite(s): RSPT 1431
Course Type: Technical

RSPT 2130  Respiratory Care Examination Preparation  1 Credit  (1 Lec, 1 Lab)
This course is a comprehensive review to optimize respiratory care credentialing exam success.
Prerequisite(s): RSPT 2355
Course Type: Technical

RSPT 2167  Respiratory Care Practicum II  1 Credit  (0 Lec, 10 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. This course is designed to provide increased exposure to management of the critically ill patient.
Prerequisite(s): RSPT 1267;
Co-requisite(s): RSPT 2314
Course Type: Technical

RSPT 2217  Respiratory Care Pharmacology  2 Credits  (2 Lec, 0 Lab)
This course is a study of drugs that affect cardiopulmonary systems, with an emphasis on classification, route of administration, dosages/calculations, and physiologic interactions.
Course Type: Technical
RSPT 2258  Respiratory Care Patient Assessment  2 Credits  (2 Lec, 1 Lab)
This course covers integration of patient examination techniques, including patient history and physical exam, lab studies, X-ray, pulmonary function, arterial blood gases, and invasive and noninvasive hemodynamics.
Co-requisite(s): RSPT 2267
Course Type: Technical

RSPT 2266  Respiratory Care Practicum III  2 Credits  (0 Lec, 16 Lab)
This course offers practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. This course provides the student with an opportunity to care for the critically ill pediatric and neonatal patient.
Prerequisite(s): RSPT 2167;
Co-requisite(s): RSPT 2353
Course Type: Technical

RSPT 2267  Respiratory Care Practicum IV  2 Credits  (0 Lec, 16 Lab)
This course provides practical, general workplace training supported by an individualized learning plan developed by the employer, College, and student. The course provides the student with the opportunity to observe and study diagnostic testing of the pulmonary system. Through specialty rotations in the emergency room, emergency triage and care of the traumatically injured patient are demonstrated to the student. The student is presented the opportunity to refine skills in assessment and procedures via rotations through the adult intensive care units.
Prerequisite(s): RSPT 2266;
Co-requisite(s): RSPT 2258
Course Type: Technical

RSPT 2310  Cardiopulmonary Disease  3 Credits  (3 Lec, 0 Lab)
This course covers etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases.
Prerequisite(s): RSPT 1340
Course Type: Technical

RSPT 2314  Mechanical Ventilation  3 Credits  (3 Lec, 1 Lab)
This course is a study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics.
Prerequisite(s): RSPT 1429,
Co-requisite(s): RSPT 1460
Course Type: Technical

RSPT 2317  Respiratory Care Pharmacology  3 Credits  (3 Lec, 0 Lab)
This course is a study of drugs that affect cardiopulmonary systems, with an emphasis on classification, route of administration, dosages/calculations, and physiologic interactions.
Course Type: Technical

RSPT 2325  Cardiopulmonary Diagnostics  3 Credits  (3 Lec, 1 Lab)
This course is a study of physical, radiological, hemodynamic, laboratory, nutritional, and cardiopulmonary diagnostic assessments.
Co-requisite(s): RSPT 2362
Course Type: Technical

RSPT 2353  Neonatal/Pediatric Cardiopulmonary Care  3 Credits  (3 Lec, 1 Lab)
This course is a study of neonatal and pediatric cardiopulmonary care.
Prerequisite RSPT 2471; Co-requisite RSPT 2361
Course Type: Technical

RSPT 2355  Critical Care Monitoring  3 Credits  (3 Lec, 1 Lab)
This course covers advanced monitoring techniques used to access a patient in the critical care setting.
Prerequisite(s): RSPT 2310
Course Type: Technical

RSPT 2360  Respiratory Care Clinical II  3 Credits  (0 Lec, 15 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): RSPT 1460, RSPT 2314;
Co-requisite(s): RSPT 2471
Course Type: Technical

RSPT 2361  Respiratory Care Clinical III  3 Credits  (0 Lec, 18 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): RSPT 2360, RSPT 2471;
Co-requisite(s): RSPT 2353
Course Type: Technical

RSPT 2362  Respiratory Care Clinical IV  3 Credits  (0 Lec, 18 Lab)
This course offers a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.
Prerequisite(s): RSPT 2361, RSPT 2355;
Co-requisite(s): RSPT 2325
Course Type: Technical

RSPT 2371  Mechanical Ventilation II  3 Credits  (3 Lec, 1 Lab)
This course is a continued study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics.
Prerequisite(s): RSPT 2314
Course Type: Technical

RSPT 2471  Mechanical Ventilation II  4 Credits  (4 Lec, 1 Lab)
This course is a continued study of mechanical ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics.
Prerequisite(s): RSPT 2314
Course Type: Technical
SGNL (SGNL)

SGNL 1401  Beginning American Sign Language I  4 Credits  (3 Lec, 2 Lab)
This course offers an introduction to American Sign Language (ASL) covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired. The course also offers instruction in understanding the deaf culture. Students will spend three hours a week learning language patterns and forms and two hours a week in lab activities.
Course Type: Academic

SGNL 1402  Beginning American Sign Language II  4 Credits  (3 Lec, 2 Lab)
This course continues instruction in American Sign Language (ASL) covering finger spelling, vocabulary, and basic sentence structure in preparing individuals to interpret oral speech for the hearing impaired. The course also offers instruction in understanding the deaf culture. Students will spend three hours a week learning language patterns and forms and two hours a week in lab activities.
Course Type: Academic
SOCIOLOGY (SOCI)

SOCI 1301 Introduction to Sociology  3 Credits  (3 Lec, 0 Lab)
This course covers the scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.
Prerequisite(s): Reading level 6
Course Type: Academic

SOCI 1306 Social Problems  3 Credits  (3 Lec, 0 Lab)
This course is about the application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

SOCI 2301 Marriage and the Family  3 Credits  (3 Lec, 0 Lab)
This course is a study of sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.
Prerequisite(s): Reading level 7 and Writing level 7
Course Type: Academic

SOCI 2306 Human Sexuality  3 Credits  (3 Lec, 0 Lab)
This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom.
Prerequisite(s): SOCI 1301 or PSYC 2301, Reading level 7, and Writing level 7
Course Type: Academic

SOCI 2319 Minority Studies I  3 Credits  (3 Lec, 0 Lab)
This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance/subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race/ethnicity, gender, sexual orientation, age, disability, or religion.
Prerequisite(s): Reading level 7, Writing level 7
Course Type: Academic

SOCI 2336 Criminology  3 Credits  (3 Lec, 0 Lab)
This is an examination of current trends in the nature and causes of crime, indexes of crime, perspectives and methods in criminology, psychopathy and crime, culture areas and crime, processes in criminal behavior, and sociological aspects of criminal law and procedure.
Prerequisite(s): SOCI 1301, Reading level 7 and Writing level 7
Course Type: Academic
SPANISH (SPAN)

SPAN 1411  Beginning Spanish I  4 Credits  (3 Lec, 2 Lab)
This course is basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level.
Prerequisite(s): Reading level 6
Course Type: Academic

SPAN 1412  Beginning Spanish II  4 Credits  (3 Lec, 2 Lab)
This course is a continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level.
Prerequisite(s): SPAN 1411
Course Type: Academic

SPAN 1415  Essentials of Spanish for Health Vocations  4 Credits  (3 Lec, 2 Lab)
This course requires intensive practice in basic grammar, pronunciation, reading and simple conversation; emphasis is placed on medical terminology. This course cannot be substituted for SPAN 1411
Course Type: Academic

SPAN 2311  Intermediate Spanish I  3 Credits  (3 Lec, 0 Lab)
This course is designed to give the student who has completed Spanish 1411 and 1412 increased fluency and confidence in the use of the Spanish language. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): SPAN 1411-1412
Course Type: Academic

SPAN 2312  Intermediate Spanish II  3 Credits  (3 Lec, 0 Lab)
This course is a continuation of Spanish 2311. Although no lab is scheduled, students will have access to tapes and other lab materials and will be encouraged to use these supplemental learning tools.
Prerequisite(s): SPAN 2311
Course Type: Academic

SPAN 39003  Beg Spanish Part 2  1.8 Credits
## SPEECH (SPCH)

**SPCH 1311 Introduction to Speech Communication 3 Credits (3 Lec, 0 Lab)**
This course introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking.
Prerequisite(s): Reading level 6

Course Type: Academic

**SPCH 1315 Public Speaking 3 Credits (3 Lec, 0 Lab)**
This course is an application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations.
Prerequisite(s): Reading level 6

Course Type: Academic

**SPCH 1318 Interpersonal Communications 3 Credits (3 Lec, 0 Lab)**
This course is the application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors.
Prerequisite(s): Reading level 6

Course Type: Academic

**SPCH 1321 Business and Professional Speech 3 Credits (3 Lec, 0 Lab)**
This course is the study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats.
Prerequisite(s): Reading level 6

Course Type: Academic

**SPCH 1342 Voice and Diction 3 Credits (3 Lec, 0 Lab)**
This course covers instruction in the development of effective habits in the use of the speaking voice. It covers the study of English phonetics, phrasing, intonation and voice production. Training is given to enable the student to listen intelligently to the sound of his/her own voice. Students cannot receive credit for both SPCH 1342 and DRAM 2336.
Prerequisite(s): Reading level 6

Course Type: Academic

**SPCH 2333 Discussion and Small Group Communication 3 Credits (3 Lec, 0 Lab)**
This course includes discussion and small group theories and techniques as they relate to group processes and interaction.
Prerequisite(s): Reading level 7

Course Type: Academic

**SPCH 2335 Argumentation and Debate 3 Credits (3 Lec, 0 Lab)**
This course includes instruction in the principles of argumentation and debate; analysis and discussion of current public questions in briefing, strategy and refutation. Students will not receive credit for both SPCH 2335 and SPCH 2336.
Prerequisite(s): Reading level 7

Course Type: Academic

**SPCH 2336 Forensics 3 Credits (3 Lec, 0 Lab)**
This is open to students in interpretation and forensics as related to competition and public performance. Students will not receive credit for both SPCH 2335 and SPCH 2336.
Prerequisite(s): Reading level 7

Course Type: Academic

**SPCH 2341 Oral Interpretation 3 Credits (3 Lec, 0 Lab)**
This course covers an introduction to oral interpretation of literature, including preparation and reading of printed material, and practical experience in storytelling and choral speaking. Instruction in techniques and analysis of literature will be read aloud. It covers the techniques of oral reading. Students cannot receive credit for both SPCH 2341 and DRAM 2341.
Prerequisite(s): Reading level 6

Course Type: Academic
SURGICAL TECHNOLOGY (SRGT)

SRGT 1260 Clinical I Surgical  2 Credits  (0 Lec, 8 Lab)
This is a method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Introductory level. Co-requisite(s): SRGT 1505 and SRGT 1509

Course Type: Technical

SRGT 1360 Clinical II Surgical  3 Credits  (0 Lec, 12 Lab)
This is a method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the College faculty. Clinical experiences are unpaid external learning experiences. The course may be repeated if topics and learning outcomes vary. Intermediate level. Co-requisite(s): SRGT 1541

Course Type: Technical

SRGT 1505 Introduction to Surgical Technology  5 Credits  (4 Lec, 4 Lab)
This is an orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences, and patient care concepts.

Course Type: Technical

SRGT 1509 Fundamentals of Perioperative Concepts and Techniques  5 Credits  (4 Lec, 3 Lab)
This course is an in-depth coverage of perioperative concepts such as aseptic/sterile principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field.

Co-requisite(s): SRGT 1260

Course Type: Technical

SRGT 1541 Surgical Procedures I  5 Credits  (5 Lec, 0 Lab)
This is an introduction to surgical procedures and related pathologies with emphasis on surgical procedures related to general, obstetrics/gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment, and supplies. Prerequisite(s): SRGT 1505, 1509, and 1260. Co-requisite SRGT 1360.

Course Type: Technical

SRGT 1542 Surgical Procedures II  5 Credits  (5 Lec, 0 Lab)
This is an introduction to surgical procedures and related pathologies with emphasis on surgical procedures related to thoracic, peripheral vascular, plastic/reconstructive, ophthalmology, cardiac, and neurological surgical specialties incorporating instruments, equipment, and supplies. Prerequisite(s): HPRS 2200, 2301; SRGT 1505, 1509, 1260, 1360, and 1541.

Co-requisite(s): SRGT 2460

Course Type: Technical

SRGT 1543 Professional Readiness  1 Credit  (1 Lec, 0 Lab)
This course is a transition into the professional role of the surgical technologist. Includes professional readiness for employment, attaining certification, and maintaining certification status.

Prerequisite(s): HPRS 2200, 2301; SRGT 1505, 1509, 1260, 1360, and 1541.

Course Type: Technical

SRGT 2130 Fundamentals of Perioperative Concepts and Techniques  5 Credits  (4 Lec, 3 Lab)
This course is an in-depth coverage of perioperative concepts such as aseptic/sterile principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field.

Co-requisite(s): SRGT 1260

Course Type: Professional

SRGT 2460 Clinical III Surgical  4 Credits  (0 Lec, 20 Lab)
This course is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Co-requisite(s): SRGT 1542

Course Type: Technical
WELDING (WLDG)

WLDG 1204 Fundamentals of Oxy-Fuel Welding and Cutting 2 Credits (1 Lec, 3 Lab)
This course covers Oxy-fuel welding and cutting equipment. Includes equipment safety, setup, and maintenance.  
Course Type: Technical

WLDG 1305 Art Metals 3 Credits (2 Lec, 2 Lab)
This course covers the fundamentals of conceptualizing and producing utilitarian items in ferrous and non-ferrous metals. Includes skill development through the techniques of sinking, raising, repousse, and piercing to create objects from sheet and stock materials. Also covers welding, brazing, soldering, tinning, polishing, and tool making.  
Course Type: Technical

WLDG 1308 Metal Sculpture 3 Credits (2 Lec, 2 Lab)
This course covers techniques and methods of oxy-acetylene and electric welding and cutting to produce metal sculptures. Includes skill development in material forming, welding, brazing, and finishing techniques. Also covers work ethics, artistic styles, and professionalism.  
Course Type: Technical

WLDG 1337 Introduction to Welding Metallurgy 3 Credits (2 Lec, 4 Lab)
This course is a study of metals from the ore to the finished product. The emphasis of the course is on metal alloys, heat treating, hard surface welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and ductility.  
Course Type: Technical

WLDG 1412 Introduction to Flux Cored Arc Welding 4 Credits (2 Lec, 6 Lab)
This course is an overview of terminology, safety procedures, and equipment set-up. Practice in performing T-joints, lap joints, and butt joints using Flux Cored Arc Welding (FCAW) equipment.  
Course Type: Technical

WLDG 1413 Introduction to Blueprint Reading 4 Credits (2 Lec, 6 Lab)
This course is a study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production.  
Course Type: Technical

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) 4 Credits (2 Lec, 6 Lab)
This is an introduction to the shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction is provided on SMAW fillet welds in various positions.  
Course Type: Technical

WLDG 1430 Introduction to Gas Metal Arc Welding (GMAW) 4 Credits (2 Lec, 6 Lab)
This course covers principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools and equipment. Instruction provided in various joint designs.  
Course Type: Technical

WLDG 1434 Introduction to Gas Tungsten Arc Welding (GTAW) 4 Credits (2 Lec, 6 Lab)
This is a study of the principles of gas tungsten welding, including setup, GTAW equipment. Instruction is provided in various positions and joint designs.  
Course Type: Technical

WLDG 1437 Introduction to Welding Metallurgy 4 Credits (3 Lec, 3 Lab)
This is a study of metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surface welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and ductility.  
Course Type: Technical

WLDG 2406 Intermediate Pipe Welding 4 Credits (2 Lec, 6 Lab)
This is a comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Welding will be done using various positions. Topics covered include electrode selection, equipment setup, and safe shop practices. Prerequisite or Co-requisite(s): WLDG 2443  
Course Type: Technical

WLDG 2413 Intermediate Welding Using Multiple Processes 4 Credits (2 Lec, 6 Lab)
This course offers instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Prerequisite or Co-requisite(s): WLDG 2451  
Course Type: Technical

WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) 4 Credits (2 Lec, 6 Lab)
This course covers advanced topics based on accepted welding codes. Training is provided with various electrodes in shielded metal arc welding with open V-groove joints in all positions. Prerequisite or Co-requisite(s): WLDG 1428  
Course Type: Technical

WLDG 2451 Advanced Gas Tungsten Arc Welding (GTAW) 4 Credits (2 Lec, 6 Lab)
This course covers advanced topics in GTAW welding, including welding in various positions and directions. Prerequisite or Co-requisite(s): WLDG 1434  
Course Type: Technical

WLDG 2453 Advanced Pipe Welding 4 Credits (2 Lec, 6 Lab)
This course covers advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment setup, and safe shop practices, with an emphasis on weld positions 5G and 6G using various electrodes. Prerequisite or Co-requisite(s): WLDG 2406  
Course Type: Technical
WLDG 2455  Advanced Metallurgy  4 Credits  (3 Lec, 3 Lab)
This is an advanced study of metallurgy as it applies to fabrication processes. Includes structure, identification, and testing of metals. Also covers temperature changes and their effect on metals, properties of metals, and factors affecting fabrication of various metals.
Prerequisite(s): METL 1305, METL 1405, WLDG 1437 or department chair approval
Course Type: Technical

WLDG 2480  Cooperative Education Welding  4 Credits  (1 Lec, 28 Lab)
This course covers career-related activities encountered in the student’s area of specialization offered through an individualized agreement among the College, employer, and student. Under the supervision of the College and the employer, the student combines classroom learning with work experience. It includes a lecture component.
Prerequisite(s): Must have Department Chair approval.
Course Type: Technical
WLDG 55001  Introduction to Gas Tungsten ARC Welding (GTAW) 12.8 Credits
Prerequisite(s): None. Note: Textbook is required. This course is an introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. It includes welding instruction in various positions on joint designs. (WLDG 1434)

WLDG 55002  Advanced Gas Tungsten ARC Welding (GTAW) 12.8 Credits
Prerequisite(s): WLDG 1430 or approval of department chair. Note: Textbook is required. This course covers advanced topics in GTAW welding, including welding in various positions and directions. (WLDG 2451)

WLDG 55003  Introduction to Pipe Welding 12.8 Credits
An introduction to welding of pipe using the shielded metal arc welding process, including electrode selection, equipment setup, and safe shop practices. (WLDG 1535)

WLDG 55004  Introduction to Gas Metal ARC Welding (GMAW) 12.8 Credits
This course includes a study of the principles of gas metal arc welding, setup and the use of GMAW equipment, and safe use of tools and equipment. It also includes instruction in various joint designs. (WLDG 1430)

WLDG 55005  Advanced Pipe Welding 12.8 Credits
Prerequisite(s): WLDG 2406 or approval of department chair. Note: Textbook is required. This course covers advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment setup and safe shop practices, with an emphasis on weld positions 5G and 6G using various electrodes. (WLDG 2453)

WLDG 55006  Comprehensive Introduction to Shielded Metal Arc Welding 14.4 Credits
Training covers the shielded metal arc welding process emphasizing power sources, electrode selection, oxy-fuel cutting, and various joint designs. Also included are employability and professional development skills designed to enhance the prospect of participants being hired, retained, and promoted in their chosen occupation.

WLDG 55007  Comprehensive Advanced Shielded Metal Arc Welding 14.4 Credits
Training includes SMAW fillet welds in various positions, accepted welding codes, and instruction with various electrodes in shielded metal arc welding processes with open V-groove joint positions. Also included are employability and professional development skills designed to enhance the prospect of participants being hired, retained, and promoted in their chosen occupation.

WLDG 55008  Advanced Shielded Metal Arc Welding (SMAW) 12.8 Credits
Prerequisite(s): WLDG 1428 or approval of department chair. Note: Textbook is required. This course covers advanced topics based on accepted welding codes. Training is provided with various electrodes in shielded metal arc welding with open V-groove joints in all positions. (WLDG 2443)

WLDG 55009  Stainless Steel (GTAW/SMAW) 12.8 Credits
An in-depth study of welding stainless steel. Instruction provided on SMAW and GTAW welding in various position groove welds. (WLDG 2571)

WLDG 55010  Stainless Steel TIG Welding 1.2 Credits
This course will cover TIG equipment and Gas Tungsten Arc Welding. Learn to set up TIG equipment, grind tungsten, fuse and fill weld stainless steel, and general safety.

WLDG 55011  Shielded Metal Arc Welding (SMAW) 12 Credits
This course covers basic maintenance and structural welding techniques and applications.

WLDG 55012  Gas Tungsten Arc Welding (GTAW) Fundamentals 4.8 Credits
Gas Tungsten Arc Welding (GTAW). Includes setup and safe use of GTAW equipment as well as instruction in flat positions on joint designs.

WLDG 55013  Introduction to Gas Metal Arc Welding (MIG) 11.2 Credits
A study of the principles of gas metal arc welding, setup and use of Gas Metal Arc Welding equipment, and safe use of tools/equipment. Instruction in various joint designs.

WLDG 55014  Introduction to Gas Tungsten Arc Welding 11.2 Credits
An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs.

WLDG 55015  Basic Shielded Metal Arc Welding (SMAW) 15.2 Credits

WLDG 55016  Intro to Plant Safety & Inspection Tech 4 Credits
This course is designed to describe the working environment of process and manufacturing plants. The course provides an introduction to the Nondestructive Testing and Inspection technology applied to process and manufacturing plants to insure equipment and personnel safety. Career development and employment opportunities are discussed. NDT Certification is discussed. Recent Technical (ASNT) Society conferences, papers and company bulletins and brochures are provided and reviewed. Local (Houston) ASNT sectional activities and opportunities are discussed. API Inspection certification and opportunities are discussed.

WLDG 55017  Eddy Current I 4 Credits
This course is designed for manufacturers, service organizations, and overhaul agencies, who require their technicians or engineers to be trained in the application of eddy current inspection techniques. The Level I course is a basic course in eddy current theory, test instrumentation, coils and basic impedance plane principles. Students are trained to perform conductivity, lift-off, thickness, and flaw detection application. The course satisfies the training hours needed for Level I certification in accordance with SNT-TC-1A.

WLDG 55018  Eddy Current II 4 Credits
This course is designed for manufacturers, service organizations, and overhaul agencies, who require their technicians or engineers to be trained in the application of eddy current inspection techniques. This advanced program stresses eddy current test setup and display interpretation based on impedance plane analysis as well as covering numerous applications, using surface probes, inner diameter probes, and encircling coils. The course satisfies the training hours needed for Level II certification in accordance with SNT-TC-1A.

WLDG 55019  Welding Inspection Technology 4 Credits
This course includes general principles of welding inspection including an overview of welding tools and equipment, metallurgy, chemistry and joint design.

WLDG 55020  Ultrasonic Flaw Sizing & Detection 4 Credits
This course includes general principles of welding inspection including an overview of welding tools and equipment, metallurgy, chemistry and joint design.
WLDG 55021 Ultrasonic Testing Level I (UT I) 4 Credits
A comprehensive "first" course for persons with little or no background in ultrasonic testing. Although introductory, this program offers in-depth coverage of ultrasonic theory and instrument operation. Our own training manual, including detailed laboratory exercises, enables clear understanding of technical principles and test procedure. Lab training stresses procedural testing and proper recording of test results. Applications include precision thickness gauging, flaw detection and evaluation, plus introduction to angle beam and immersion testing. Satisfies training hours needed for Level I certification in accordance with SNT-TC-1A.

WLDG 55022 Ultrasonic Testing Level II (UT II) 4 Credits
An advanced, laboratory-intensive course for developing practical skills. The course is applications oriented and includes weld inspection, bond inspection, and immersion techniques. Angle beam testing and defect evaluations are covered in detail. The course satisfies the training hours needed for Level II certification in accordance with SNT-TC-1A.

WLDG 55023 Radiography Level I 4 Credits
This course is designed for manufacturers, service organizations and overhaul agencies who require their technicians or engineers to be trained in the application of radiographic techniques. The course covers both X and Gamma Radiography with an approximately equal balance of theory and practical sessions. As well as working through their own supervised practical exercises, students will receive full instruction on darkroom procedures and radiographic interpretation. The safe and correct uses of industrial radiographic exposure devices (X and gamma) are covered. The Level I course is intended to introduce and provide participants with the theory and applications of radiographic inspection. The course satisfies the training hours needed for Level I certification in accordance with SNT-TC-1A.

WLDG 55024 Radiography Level II 4 Credits
The Level II courses are advanced programs, intended for persons who have successfully completed Level I training. This course is designed for manufacturers, service organizations and overhaul agencies who require their technicians or engineers to be trained in the application of radiographic techniques. The course covers both X and Gamma Radiography with an approximately equal balance of theory and practical sessions. As well as working through their own supervised practical exercises, students will receive full instruction on darkroom procedures and radiographic interpretation. The safe and correct uses of industrial radiographic exposure devices (X and gamma) are covered. The Level II course builds upon the Level I syllabus and emphasizes a greater depth of study, development of sensitivity curves, exposure chart production and the development of procedures and techniques. The course satisfies the training hours needed for Level II certification in accordance with SNT-TC-1A.

WLDG 55025 Radiography Film Interpretation 4 Credits
This course will provide the theoretical and practical knowledge required for sound decision-making when interpreting radiographs to accepted codes and standards. Radiographic inspection processing is covered as well as all of the varying parameters that contribute to the final radiographic image.

WLDG 55026 Radiation Safety 4 Credits
WLDG 55027 Welding Blueprint Reading 2.4 Credits
Trainees are introduced to welding symbols, views, measurements and techniques needed for interpreting blueprints used in welding operations.

WLDG 55028 Shielded Metal Arc Welding-Basic 8.4 Credits
Trainees are introduced to the fundamental Shield Metal Arc Welding skills, safety practices, equipment and techniques needed for producing quality welded beads and joints.

WLDG 55029 Shielded Metal Arc Welding (SMAW)-Fundamentals I 2.4 Credits
Experienced students will receive training in SMAW techniques to achieve AWS certification through AWS D1.1 welding code.

WLDG 55030 Shielded Metal Arc Welding (SMAW) II 0.8 Credits
Students experienced in Shielded Metal Arc Welding perform vertical and overhead welds to achieve AWS D1.1 certification.

WLDG 55031 Welding Procedures 4 Credits
WLDG 55032 Ultrasonic Testing Level II 4 Credits
This course covers the fundamentals, through intermediate and advanced skills in SMAW. Skill development and practical application is a critical part of this course. Topics covered will include: power sources, electrode selection, oxy-fuel cutting, joint design, the production of various fillets and groove welds, accepted welding code and processes with open V-groove joints in all positions.

WLDG 55035 Shielded Metal Arc Welding (SMAW) III 17.2 Credits
This is a comprehensive course including advanced topics and practice on the welding of pipe using the shielded metal arc welding (SMAW) process. Topics covered include: electrode selection, equipment setup, and safe shop practices. There will be emphasis on weld positions 5G and 6G using various electrodes.

WLDG 55036 Intermediate Pipe Welding 12.8 Credits
Prerequisite WLDG 1428. Note: Textbook is required. This is a comprehensive course on welding of pipe using the shielded metal arc welding (SMAW) process. Welding will be done using various positions. Topics covered include electrode selection, equipment setup and safe shop practices. (WLDG 2406)

WLDG 55037 Intermediate Welding using Multiple Processes 12.8 Credits
Prerequisite(s): WLDG 1434, WLDG 1430, WLDG 1428 Note: Textbook is required. This course offers instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shielding metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW) or any other approved welding process. (WLDG 2413)

WLDG 55038 Art Metals 6.4 Credits
Prerequisite(s): None. Note: Textbook is required. This course covers the fundamentals of conceptualizing and producing utilitarian items in ferrous and non-ferrous metals. It includes skill development through the techniques of sinking, raising, repousse and piercing to create objects from sheet and stock materials. It also covers welding, brazing, soldering, tinning, polishing and tool making. (WLDG 1308)

WLDG 55040 Essentials of Welding and Cutting II 17.2 Credits
This course will provide additional instruction in oxy-fuel and intensive study of SMAW in the production of various fillet and groove welds. Extensive skill development in the lab with broad practical application is crucial to mastery in this course. Topics to be covered include: principles of welding operations, weld size and profiles, welding in the overhead position, removal of carbon arc welds, bevel groove welds with various backing plates, and various tools and equipment usage.
WLDG 55041 Essentials of Welding and Cutting I 17.2 Credits
This course will provide the basics of welding beginning with oxy-fuel cutting and progressing through fillet welds. Extensive skill development in the lab with broad practical application is crucial to mastery in this course. Topics to be covered include: welding and cutting safety issues, basic oxy-fuel welding and cutting, basic arc welding, the production of various fillet welds, and accepted welding code and processes.

WLDG 55042 Advanced Shielded Metal Arc Welding (Mini) 8.5 Credits
Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding with open V-groove joints in all positions.

WLDG 55043 Intermediate Pipe Welding (Mini) 9.2 Credits
Covers pipe welding techniques and procedures.

WLDG 55044 Introduction to shielded Metal Arc Welding (Mini) 8.5 Credits
An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions.

WLDG 55045 Maintenance Welding 8 Credits
An introduction to oxy-fuel and arc welding and cutting practice and procedures.

WLDG 55046 Fluor Intro to Pipe Welding 16 Credits
An introduction to welding of pipe using the shielded metal arc welding process, including electrode selection, equipment setup, and safe shop practices.

WLDG 55047 Fluor Intermediate Pipe Welding 16 Credits
A comprehensive course on welding of pipe using the shielded metal arc welding (SMAW) process. Welds will be done using various positions. Topics covered include electrode selection, equipment setup and safe shop practices.

WLDG 55048 Fluor Advanced Pipe Welding 8 Credits
Advanced Topics involving welding of pipe using SMAW and other processes. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on positions 5G and 6G using various electrodes and tube welding.

WLDG 55049 Fluor Advanced Pipe SMAW/GTAW 16 Credits
A comprehensive course on welding of pipe using the shielded metal arc welding (SMAW) process.

WLDG 55050 Welding Beginning 7.5 Credits
Identify safety procedures associated with oxy-fuel and arc welding and cutting processes; and demonstrate basic welding and cutting.

WLDG 55051 Welding Intermediate 7.5 Credits
Prerequisite(s): Welding Beginning Practice basic shop safety; define the principles of arc welding; select electrodes and amperage settings for various materials; perform SMAW operations.

WLDG 55052 Metal Sculpture 6.4 Credits
Prerequisite(s): None This course covers techniques and methods of oxy-acetylene and electric welding and cutting to produce metal sculptures. It includes skill development in metal forming, welding, brazing and finishing techniques. It also covers work ethics, artistic styles and professionalism. (WLDG 1308)

WLDG 55053 Advanced Field Combination Welder 12.8 Credits
This course offers instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shielding metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process.

WLDG 55054 Intro Blueprint Reading 12.8 Credits
Prerequisite(s): None A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also includes interpretation of plans and drawings used by industry to facilitate field application and production. (WLDG 1413)

WLDG 55055 Intro to FCAW 12.8 Credits
Prerequisite(s): None An overview of terminology, safety procedures, and equipment set-up. Practice in performing T-joints, lap joints, and butt joints using Flux Cored Arc Welding (FCAW) equipment. (WLDG 1412)

WLDG 55056 Oxyfuel Cut and Weld 6.4 Credits
This course covers Oxy-fuel welding and cutting equipment. Includes equipment safety, setup, and maintenance. (WLDG 1204)

WLDG 55057 Introduction to Welding & Cutting 4 Credits
This course is an introduction to basic welding techniques and practices. It includes arc welding cutting, brazing, and fabrication.

WLDG 55058 Intro to Welding Metallurgy 9.6 Credits
Prerequisite(s): None This is a study of metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging, foundry processes and mechanical properties of metal including hardness, machinability and ductility. (WLDG 1437)

WLDG 55059 Advanced Metallurgy 9.6 Credits
Prerequisite(s): WLDG 1437 or department chair approval Note: Textbook is required. This is an advanced course in the application of metallurgy principles to the processes and procedures pertaining to various metal compositions and fusions. Studies include the metallurgy and selection of filler metal groups, the nature of defects, metal fusion problems, thermal effects in metal fusion, and the welding of various kinds of steel and nonferrous materials. (WLDG 2455)
The purpose of this 8 hour workshop is to help participants experience firsthand how lean improves quality, reduces cycle time, improves delivery performance, reduces WIP and enables companies to show a profit.

INMT 55005 Lean Asset Management 0.7 Credits
Lean Asset Management offerings are geared to making the most effective use of machines and equipment, and facilities to allow the greatest throughput with the least amount of capital investment.

INMT 55006 MSSC Processes and Production - FT 1.8 Credits
Students learn the types of production processes, factors of production planning and work flow along with the components of production.

INMT 55007 SS Workplace Organization 0.8 Credits
5S housekeeping is the most basic and fundamental approach to improving workplace performance in all types of business. The 5S system is designed to improve workplace organization and standardization. This course offers an opportunity to experience firsthand how the 5S System reduces waste in simulated production facility. Participants learn the concepts of the 5S System and then apply them to transform a cluttered, disorganized area into a clean, organized and orderly workplace.

INMT 55008 Lean Six Sigma Yellow Belt 1.6 Credits
This 40 hour workshop gives you an overview and application of the basic of Lean and is focused on short-term project to improve a process. Substantial resources - Engineering, Maintenance, Cell Operators, and others are available for immediate deployment. This workshop conveys you to the essentials of Kaizen and prepares you for the traditional 5-day event.

INMT 55009 Lean Six Sigma Green Belt - Week 1 4 Credits
Six Sigma Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMIAC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis.

INMT 55010 Lean Six Sigma Green Belt - Week 2 4 Credits
Six Sigma Green Belt training provides participants with enhanced problem-solving skills, with an emphasis on the DMIAC (Define, Measure, Analyze, Improve and Control) model with simple and effective waste-reducing tools of lean. Six Sigma Green Belt certification helps the employee serve as a trained team member with in his or her function-specific area of the organization. The focus allows the Green Belt to work on small, carefully defined Six Sigma projects to gain hands-on experience with tools such as process mapping, project scoping, value stream mapping and analysis.

INMT 55011 Lean Certificate Program 1 Credit
The concept behind Lean is to maximize customer value while minimizing waste...creating value from the customer's point of view! Lean increases the speed, efficiency and flexibility of processes through the elimination of waste! It focuses on improving your work, people, information and cash flows with dramatic results!

INMT 55012 Lean Six Sigma Yellow Belt - Online 1 Credit
This class gives you an overview and application of the basic of Lean and is focused on short-term project to improve a process. Substantial resources - Engineering, Maintenance, Cell Operators, and others are available for immediate deployment. This workshop conveys you to the essentials of Kaizen and prepares you for the traditional 5-day event.
INMT 55013  Lean Six Sigma Yellow Belt - Hybrid with Projects  2.8 Credits
This class gives you an overview and application of the basic of Lean and is focused on short-term project to improve a process. Substantial resources - Engineering, Maintenance, Cell Operators, and others are available for immediate deployment. This workshop conveys you to the essentials of Kaizen and prepares you for the traditional 5-day event.

INMT 55014  Introduction to Craft Skills  8 Credits
This course provides the student the opportunity to explore the pipefitting, welding, electrical and sheet metal trades. The curriculum is designed to introduce the student to the industry and provide an experience in each trade, in order to assist them in making a decision as to future studies.

INMT 55015  Lean Six Sigma JumpStart  4 Credits
JumpStart training is the same as the first week of Green Belt. Learn the basics of Six Sigma's DMAIC roadmap and receive an introduction to statistics and Minitab statistical software in this course. Learn to map out processes and identify sources of variation, and gain a basic understanding of statistics analysis. The Jumpstart program is ideally suited for those who will support Green and Black Belt project leaders. Following the Six Sigma business methodology, you'll use problem solving and data analysis tools in a structured format. Learn ways to bring about incremental improvements and maintain a process within customer specifications that are in line with business goals. Through lecture and classroom exercises, you'll work through example problems and complete assignments individually and in a group. Completion of exercises and classroom participation is expected throughout the training.

INMT 55016  Lean Essentials Boot Camp E-Learning & Virtual Class  3 Credits
The concept behind Lean is to maximize customer value while minimizing waste...creating value from the customer's point of view! Lean increases the speed, efficiency and flexibility of processes through the elimination of waste! It focuses on improving your work, people, information and cash flows with dramatic results!

INMT 55017  Global Logistics Management  4.8 Credits
Prerequisite(s): None. This course covers the study of global logistics, management processes, procedures, and regulations used in transportation, physical distribution, warehousing, inventory control, material handling, packaging, plant and warehouse location, risk management, customer service, and networks for logistics, suppliers, and information. It includes decision making and case resolution techniques to solve problems and to develop logistical and information networks for supply chain management appropriate for global corporations. (IBUS 1300)

INMT 55018  NCCER Industrial Maintenance Level 1  12 Credits
Prerequisite(s): None Note: Includes CORE curriculum. This course prepares the trainee for credit in Level 1 NCCER Industrial Maintenance, including instruction in to the orientation of the trade, hand and power tools, blueprint reading, valves, gaskets and packing, pumps and drives, and lubrication.

INMT 55020  NCCER Industrial Maintenance Level 3  12 Credits
Prerequisite(s): Successful completion of NCCER Industrial Maintenance Level 2. This course prepares the trainee for credit in Level 3 NCCER Industrial Maintenance, including advanced trade math, precision measuring tools, and the installation of bearings, seals and couplings, and setting baseplates, including pre-alignment.

INMT 55022  NCCER Industrial Maintenance 1  7.2 Credits
This course prepares the trainee for credit in level 1 NCCER Industrial Maintenance, including instruction in to the orientation of the trade, hand and power tools, blueprint reading, valves, gaskets and packing, pumps and drives, and lubrication.

INMT 55023  Basic Maintenance & Inspection of Pressure Relieving Devices  0.8 Credits
This introductory course will teach personnel the basic skills involved in the inspection and maintenance of pressure relieving devices, such as rupture disks, conservation vents, flame arrestors, and relief valves.
## CATALOG REVISIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Section</th>
<th>Change Description (Before)</th>
<th>Change Description (After)</th>
<th>Date of Update - Effective Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General</td>
<td>Lab Fees—A laboratory fee is collected in an amount sufficient to cover the general cost of the laboratory materials and supplies used by a student. The amount does not exceed the lesser of $48 per semester credit hour of laboratory course credit or the cost of actual materials and supplies used by the student. A lab fee chart appears later in this section. Lab fees are subject to change.</td>
<td>Changed to: Lab Fees—A laboratory fee is collected in an amount sufficient to cover the general cost of the laboratory materials and supplies used by a student. The amount does not exceed the lesser of $24 per semester credit hour of laboratory course credit or the cost of actual materials and supplies used by the student. A lab fee chart appears later in this section. Lab fees are subject to change.</td>
<td>11/12/2018</td>
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<tr>
<td>2</td>
<td>General</td>
<td>Add Incidental Fees under Invasive Cardiovascular Tech. (EIT)</td>
<td>Added CVTT 2461 .... $15</td>
<td>11/12/2018</td>
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<tr>
<td>3</td>
<td>General</td>
<td>Change PHRA 1243(EPU) $129 to (EPH) $129 to (EPH)</td>
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<td>11/9/2018</td>
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<td>4</td>
<td>General</td>
<td>Add Agriculture (AGI)</td>
<td>Added: Agriculture (AGI) AGRI 1309..... $24 AGRI 1315..... $24 AGRI 1319..... $24 AGRI 1407..... $24</td>
<td>11/9/2018</td>
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<td>General</td>
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<td>Changed price fees: Medical Imaging RADR 1203..... RADR 1213..... $5</td>
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<td>6</td>
<td>General</td>
<td>Non-Destructive Testing Technology (NDT)</td>
<td>Changed name to Nondestructive Testing Technology (NDT)</td>
<td>11/9/2018</td>
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<td>7</td>
<td>General</td>
<td>Welding Technology (WLD) remove WLDG 2455 $24</td>
<td>Removed WLDG 2455 $24</td>
<td>11/9/2018</td>
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<tr>
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<td>General</td>
<td>Add WLDG 2455 $24 to Nondestructive Testing in Course Fees</td>
<td>Added WLDG 2455 $24 after Nondestructive WLDG 1437 Testing Technology (NDT) after WLDG 1437 in Lab Fees</td>
<td>11/9/2018</td>
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<td>9</td>
<td>General</td>
<td>Course Fees edit</td>
<td>Consolidated Medical Imaging</td>
<td>2/12/2019</td>
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<tr>
<td>10</td>
<td>General</td>
<td>Course fee title Maritime Technology</td>
<td>Changed name to Maritime Transportation</td>
<td>1/23/2019</td>
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<tr>
<td>11</td>
<td>General</td>
<td>Add WLDG 2455 $8 to Nondestructive Testing in Course Fees</td>
<td>Added WLDG 2455 $8</td>
<td>11/9/2018</td>
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<tr>
<td>12</td>
<td>General</td>
<td>Name change: Non-Destructive Testing Technology (02F/11F)</td>
<td>Changed name to Nondestructive Testing Technology (02F/11F)</td>
<td>11/9/2018</td>
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<tr>
<td>13</td>
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<td>Changed name to Welding Technology (02F)</td>
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<td>WLDG 2455</td>
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<td>San Jacinto College on Cheating, students should exhibit honesty, integrity and high standards in their academic work.</td>
<td>Members of the College community benefit from an open and honest educational environment. Upholding academic integrity is the responsibility of everyone.</td>
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<td>Cheating, Plagiarism and Collusion The following institutional guidelines concerning cheating, plagiarism and collusion are provided for the information of all students enrolled in any course offered by San Jacinto College. Incidents of academic dishonesty will not be tolerated and students guilty of such conduct are subject to disciplinary consequences. The importance of knowledge properly gained is reinforced by the grading system. The importance of honesty fully</td>
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<td>Gaining knowledge and practicing honesty go hand-in-hand. The importance of knowledge properly gained is reinforced by the grading system. The importance of honesty fully</td>
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practiced is emphasized by rules against cheating, plagiarism and collusion. Any act of cheating, plagiarism or collusion in any degree subjects a student to the disciplinary procedures listed below.

Cheating • Students must be completely honest in all phases of their work. Cheating includes, but is not limited to, the following: • dishonesty of any kind on examinations, assignments or program requirements; • unauthorized possession of examinations or unapproved notes or sources at any time, whether used or not; • copying or obtaining information from another student during an examination or performance of a lab skill or competency; • alteration or falsification of course or academic collusion, and fabrication are provided for the information of all students enrolled in any course offered by San Jacinto College. Gaining knowledge and practicing honesty go hand in hand. The importance of knowledge properly gained is reinforced by the grading system, therefore, honesty fully practiced is emphasized by rules against cheating, plagiarism, collusion, and fabrication. Any act of cheating, plagiarism, collusion, or fabrication in any degree subjects a student to the disciplinary procedures listed below.
Catalog Revisions

records; and • unauthorized entry into or presence in any office. Plagiarism Documenting the use of others' work is important because it recognizes the original author's effort, establishes the student writer's credibility and supports the audience's future research. Plagiarism is offering the work of another as one's own, intentionally or unintentionally without proper acknowledgment or support of sources at any time, whether used or not, or copying or obtaining information from another student during an examination or unapproved notes or research. Students who fail to give appropriate credit for ideas or material they take from another, whether a fellow student or a resource writer, are guilty of plagiarism (i.e., stealing the words or ideas of another). The College may contract with companies or organizations that provide plagiarism-detection services. Such work for more than one course without obtaining approval from San Jacinto College 2018-2019
companies may receive students’ work for the purpose of comparing the students’ work with a reference database. Students enrolling at San Jacinto College agree as a condition of their enrollment that their work may be submitted to such companies for the purpose of plagiarism detection and that the company may retain a copy of the work for plagiarism-detection purposes. Such companies will not copy, use or distribute the students’ work. Collusion Learning is an active process for all students; completion and submission of original work is essential to the learning process. Collusion is unauthorized collaboration in preparing any work offered for credit. Plagiarism Documenting the use of others’ work is important because it recognizes the original author’s effort, establishes the student writer’s credibility and supports the audience’s future research. Plagiarism is offering the work of another as one’s own, intentionally or unintentionally, without proper acknowledgment. Students who fail to give appropriate credit for ideas or material they take from another, whether a fellow student or a resource writer, are guilty of plagiarism (i.e., stealing the words or ideas of another). The College may contract with
includes, but is not limited to, knowingly using, buying, selling, stealing, sharing, transporting or soliciting, in whole or in part, any information or materials to be submitted as a student’s own work. Collusion also includes impersonating another student for the purpose of taking a course or exam. A student who provides access to the materials is also guilty of collusion and subject to the same penalties. Therefore, students should take reasonable precautions to protect their work from being compromised. Responding to Violations Faculty have the responsibility to initiate disciplinary action in response to violations of the rules regarding academic honesty. A faculty member is responsible for collecting companies or organizations that provide plagiarism-detection services. Such companies may receive students’ work for the purpose of comparing the students’ work with a reference database. Collusion also includes impersonating San Jacinto College as a condition of their enrollment that their work may be submitted to such companies for the purpose of plagiarism detection and that the company may retain a copy of the work for plagiarism-detection purposes. Such companies will not copy, use or distribute the students’ work. Plagiarism includes, but is not limited to, the following: • using the ideas and words of another person, without giving that person appropriate credit, •
any evidence of cheating at the time it occurs. A student may not withdraw from the course during the investigation of an incident of academic dishonesty or when a course grade of F has been imposed. A record will be kept of any imposed penalty or disciplinary action. Penalties if, in the judgment of the instructor, cheating, plagiarism or collusion has occurred, he or she may assess an appropriate penalty with a recorded reprimand: • copying computer programs or data files belonging to someone else, and • recommendation for suspension from the College or expulsion from a program, which is submitted to the Provost; the Provost’s decision is final. • failure of the course; the student may appeal the grade through the Final Grade Appeal process. • failure of the assignment by the student representing another’s artistic or scholarly works (i.e., musical compositions, computer programs, photographs, paintings, drawings, sculptures, etc.) as your own, • submitting a paper purchased in whole or in part from another person or other sources, including the internet, sanjac.edu • copying computer programs or data files belonging to someone else, and • recommendation for suspension from the College or expulsion from a program, which is submitted to the Provost; the Provost’s decision is final. • failure of the course; the student may appeal the grade through the Final Grade Appeal process. • failure of the assignment by the student representing another’s artistic or scholarly works (i.e., musical compositions, computer programs, photographs, paintings, drawings, sculptures, etc.) as your own, • submitting a paper purchased in whole or in part from another person or other sources, including the internet, sanjac.edu
Faculty should also communicate with their department chairs/program directors and deans regarding any violation of the college honesty code. Fabrication is all experimental data, observations, interviews, statistical surveys, and other information collected and reported as academic.

Should the instructor recommend suspension or expulsion of the student, the Provost has the responsibility and authority to determine whether the student should take reasonable precautions to protect their work from being compromised. Collusion includes, but is not limited to, the following:

- knowingly using, buying, selling, stealing, or soliciting, in whole or in part, any information or materials to be submitted as a student's own work,
- impersonating another student for the purpose of taking a course or materials, and
- agreeing with one or more persons to commit any act of academic dishonesty.

Fabrication is all experimental data, observations, interviews, statistical surveys, and other information collected and reported as academic.
Reporting Cheating, Plagiarism and Collusion

The instructor will prepare an Academic Dishonesty Incident Report for the Provost, the dean, department chair and/or program director. The report indicates the nature of the incident and the resulting penalty. The student has the privilege of making a written declaration on his or her own behalf to the instructor. Copies of this declaration, which are not construed as an appeal, but for information only, will be filed with the Provost.

Fabrication includes, but is not limited to, the following:

• falsifying the results obtained from research or laboratory experiments,
• presenting results of research or laboratory experiments without the research or laboratory experiments being performed,
• changing answers or grades after an academic work has been returned to the student.

Responding to Violations

Faculty have the responsibility to initiate disciplinary action in response to violations of the rules regarding academic honesty. A faculty member is responsible for investigating these violations which includes, but is not limited to, collection of any evidence of cheating at the time it work not authenticated.
occurs and discussions with the student and witnesses. A student may not withdraw from the course during the investigation of an incident of academic dishonesty or when a course grade of F has been imposed. A record will be kept of any imposed penalty or disciplinary action. These violations of academic dishonesty are also communicated with respective department chairs/program directors and deans. Penalties If, in the judgment of the faculty member, cheating, plagiarism, collusion, or fabrication has occurred, he or she may assess one of the following penalties: • failure of the assignment by the faculty member • require student to redo test or assignment • reduced grade on the assignment by the faculty member •
failure of the course; the student may appeal the grade through the Grade Appeal process (see Complaint Procedure 100 found in the Catalog or Student Handbook) • recommendation for suspension from the College or dismissal from a program, which is submitted to the Provost • other The faculty member will notify the student of his or her decision concerning the student's grade. Other disciplinary action may be recommended by the College if code of student conduct violations have occurred. If a student will not meet with the faculty member or if notification cannot take place because of a student's unavailability, failure to respond, or incorrect contact information, the process proceeds as
specified. Should the faculty member recommend suspension or dismissal of the student, the Provost has the responsibility and authority to determine whether the student will be suspended or dismissed. The faculty member will prepare an online Academic Dishonesty Incident Report for the Provost, the Dean, Department Chair and/or Program Director. The report indicates the nature of the incident, student identifying information, and the proposed penalty. The Department Chair will generate a decision letter to the student that will include the proposed penalty and the student’s appeal rights. Appeals A student may appeal a proposed penalty made by a faculty member. The student shall initiate the appeal
process within five (5) days following the communication of the proposed penalty. The procedures for appealing a proposed penalty are:

Student meeting with Academic Dishonesty Appeals Committee:
Within five (5) working days after receiving written notification of the proposed penalty via email (or first-class mail when necessary), a student may request a hearing before an Academic Dishonesty Appeals Committee. The student must submit a written request directly to the respective Campus Provost either via email or with a mailed letter. A first-class letter will be deemed to have been received on the third day after the date of mailing, excluding any intervening Sunday or federal holiday. An
email will be deemed to have been received on the second day after the sending of the message. The committee will consist of one full-time faculty member to be named by the student, one full-time faculty member to be named by the faculty member, and one full-time faculty member to be named by the Provost. The Provost will request that the student and faculty member submit the name of their nominees within five (5) working days after notification of all parties involved. Upon receiving the names of those nominees, and appointing a third faculty member to the committee, the Provost will set the time, date, and place of the closed hearing and notify all parties. This will be done within five (5)
working days after having received the names of both nominees. A student may present written evidence relevant to the appeal and may also be accompanied by an advisor. The student's advisor may attend the appeal meeting and confer with the student but may not cross-examine other participants. The student may have a maximum of two (2) persons (faculty member and advisor) in the room at the appeal committee meeting. Furthermore, an advisor may not be a witness in the matter. • The Academic Dishonesty Appeals Committee may request information from the faculty member, student, and/or other persons familiar with the matter.
The College retains the right to have legal counsel present at the appeal meeting but the attorney may not cross-examine other participants.

• In the event that a student is a qualified person with a disability under federal law and is unable to represent himself or herself at the appeal meeting because of his or her disability, the College, as a reasonable accommodation to the student, will permit the student to be represented by an advisor at the meeting. If the student is represented by legal counsel, then the College also may be represented by legal counsel.

• Within five (5) working days after the appeal meeting, the Provost will notify the student and the faculty member in writing of the committee's findings regarding the approval or denial of the appeal. The decision of the Academic Dishonesty Appeals Committee is final.
| 16 | General | Family Education Rights and Privacy Act (FERPA) In all instances, legal directives and requirements of the Family Educational Rights and Privacy Act (FERPA) of 1974 and the Texas Public Information Act pertaining to student records shall be followed. The College gives access to records only to those persons and agencies that the Privacy Act specifies, and the College will keep a record of all persons who receive access. The College will release only directory information without a student’s consent including high school dual credit/early admission students. Records of present or former students. This policy outlines the regulations that pertain to records of San Jacinto College students. Records of San Jacinto College students. The Family Educational Rights and Privacy Act of 1974 (FERPA) governs the privacy of student educational records. The Act provides eligible students with the right to inspect and review education records, the right to seek to amend those records, and the right to limit disclosure of information from the records. The Family Educational Rights and Privacy Act of 1974 (FERPA) of San Jacinto College policy VI.6000B, Confidentiality of Student Educational Records, outline the regulations that pertain to the confidentiality of education records of San Jacinto College students. | Family Education Rights and Privacy Act (FERPA) of 1974 and the Texas Public Information Act pertaining to student records shall be followed. The College gives access to records only to those persons and agencies that the Privacy Act specifies, and the College will keep a record of all persons who receive access. The College will release only directory information without a student’s consent including high school dual credit/early admission students. Records of present or former students. This policy outlines the regulations that pertain to records of San Jacinto College students. Records of San Jacinto College students. The Family Educational Rights and Privacy Act of 1974 (FERPA) governs the privacy of student educational records. The Act provides eligible students with the right to inspect and review education records, the right to seek to amend those records, and the right to limit disclosure of information from the records. The Family Educational Rights and Privacy Act of 1974 (FERPA) of San Jacinto College policy VI.6000B, Confidentiality of Student Educational Records, outline the regulations that pertain to the confidentiality of education records of San Jacinto College students. | 1/23/2019 |
study, (8) classification, and are confidential and are not public information. Therefore, the following regulations regarding student records shall apply. Educational records are all records that contain information directly related to a student. Eligibility for and awards received, with dates that the honor or award was received, (13) eligibility for and participation in officially recognized activities and sports, (14) weight and height of members of athletic teams and sports statistics and (15) enrollment status (full-time or part-time). A student may ask that directory information be withheld from the public by accessing their student on-line account (SOS) in the student records tab and indicating directory information remain confidential. The student may make this request confidential and are not public information.

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Once a student has requested that directory information be withheld, no directory information will be released except with written approval from the student. School officials (faculty, administrators, and staff, including part-time and student workers) may have access to student records when a legitimate educational interest exists. Students wanting their parent, friend or other individual to access or obtain their records should give that person a signed release specifying what they need and a photocopy of the student’s picture ID. The College may disclose education records without a student’s prior written consent under the FERPA exception for disclosure to school officials in a digital file assigned to a student record. Each student record shall be identifiable as to the source. Notes and observations recorded by an individual teacher or other employee and kept for personal use are not student records except under the following conditions:

- The information is shared with someone other than a substitute for the employee.
- The information is used in preparation of student records.

Each student record shall be identifiable as to the source. The information is used in preparation of student records.

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- The information is used in preparation of student records.

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officials with legitimate educational interests. A "school official" is a person employed by the College in an administrative, supervisory, academic or research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted as its agent to provide a service (such as an attorney, auditor, health care professional or diagnostician, computer services professional or insurer); a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee; or a student assisting another school official in performing tasks. The term "school official" also concerns a student maintained for use by the College. This includes the student's name, address, personal identifiers such as social security numbers, and other personal characteristics or information that make the student's identity easily traceable. Eligible Student - a student who attends or has attended the school from which records are requested Custodian - the Deputy Chancellor and College President of the College Custodian's Agent – Provosts, Vice Chancellors, Associate Presidents, Deans and those persons appointed by any of these to safeguard or to use student records. The term "Directory Information" – is a list of items
includes representatives of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as part of their educational programs. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. For purposes of this policy, a "school official" is: o a person employed by the College in an administrative supervisory, academic...
or research, or support staff position (including Campus Police law enforcement unit personnel and health staff) or a person or company with whom the College has contracted as its agent to provide a service (such as an attorney, auditor, health care professional or diagnostician, IT computer services professional, or insurer) or a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee or a student assisting another school official in performing his or her tasks or representative of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as
part of their educational programs or companies or organizations with whom the College has contracted to provide plagiarism-detection services. Such companies may receive a student's work product for purpose of comparing the student's work with a reference database.

Directory Information

Name
Address
Age (but not birthdate)
Degrees earned and dates Major program of study
Classification
Terms of attendance
Previous educational institutions attended
Eligibility for and honors and awards received with dates that the honor or award was received
Eligibility for and participation in officially recognized activities and sports
Weight and height of members of athletic teams and sports
statistics
Enrollment status (full-
time or part-time)
Restricting access to directory information:
A student may ask that directory information be withheld from the public by accessing their student on-line account (SOS) in the student records tab and indicating directory information remain confidential. The student may make this request at any time.
Review of Records by the Student
A student’s request for examination of his or her FERPA records may be made in person or in writing by the eligible student to the San Jacinto College Marketing Office. The Marketing Office may require proof of identity. The request shall identify the specific record(s) to be examined. Requests shall be
honored as soon as practical, but the request must be honored within 45 days. Refer to the college website for information regarding these requests. An inaccurate or inappropriate entry into the records may not be corrected or removed when an eligible student has made a request to review the record and the request has not yet been honored.

A log of requests for a student’s records shall be maintained by the San Jacinto College Marketing Office in the student’s file indicating all requests, date of requests, by who made, and whether or not each request was honored.

Release of Records
Student records may not be released to a third party unless the student consents.
in writing or unless a legally recognized exception applies (see the federal regulations at 34 C.F.R. § 99.31). Accessibility of Records without Consent

Student records shall be accessible without the student’s consent to the following:

Other school officials, including faculty members, within San Jacinto College whom the College has determined to have legitimate educational interests.

This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in § 99.31(a)(1)(B)(1) - (a)(1)(B)(3) are met. (§ 99.31(a)(1)) Officials of another school or college where the student seeks or
intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student’s enrollment or transfer, subject to the requirements of § 99.34. (§ 99.31(a) (2)). The student may request that the College forward a copy of the record to other institutions. In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. In connection with a request for “directory information” as designated by the school under § 99.37. (§ 99.31(a) (11)) State or local officials to whom educational
data must be reported. Legitimate organizations (ACT, CEEB, ETS) developing, validating, or administering predictive tests or student aid programs. Such data are not to be released in any identifiable form and will be destroyed by the organization after the research has been completed. Accrediting agencies Parents of a dependent student as defined in Section 152 of the Internal Revenue Code of 1954. Appropriate officials in connection with a health or safety emergency. In compliance with judicial order or pursuant to any lawfully issued subpoena upon written notice to the affected student. Representatives of the Comptroller General of the United States, Department of Education, administrative heads of
educational agencies, or state education authorities. Legitimate agencies providing financial assistance to students, to organizations conducting studies for the purpose of developing, validating, or administering tests, or for the purpose of improving instruction, provided that the information is not to be revealed to a third party. A victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of § 99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. Parents of a student regarding the student’s violation of any Federal, State, or local law, or of any rule or policy of the school,
governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21. Policy Availability and Notice

A copy of this policy will be made available upon request to eligible students. At least once annually, an effort shall be made to inform all eligible students of their rights under the provisions of this policy. Such effort shall be made through the College website, College catalog, and student handbook.

Student Records Management

San Jacinto College policy VI.6000A, Student Records Management, outlines the regulations that pertain to the management of educational records of San Jacinto College 2018-2019.
College students. The College shall develop and maintain a comprehensive system of student records related to various facets of the College's operation and shall ensure through reasonable procedures that records are accessed by authorized persons only, as allowed by this policy. These data and records shall be stored in a safe and secure manner and shall be conveniently retrievable for utilization by authorized school officials.

The Deputy Chancellor and College President is custodian of all records for currently enrolled students and for all official academic records; however, he or she may appoint one or more designees, as necessary, to perform record management duties.

Educational records are
all records that contain information directly related to a student and are maintained by an educational agency or institution, or by a party acting on its behalf. As used in this policy, "records" includes paper files, electronic and digital files, audio files, and video and photographic files. Type of Records Maintained

<table>
<thead>
<tr>
<th>Academic progress</th>
<th>Permanent academic data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance records</td>
<td>Standardized test results</td>
</tr>
<tr>
<td>Medical records, including meningitis test results</td>
<td>Student Discipline records</td>
</tr>
<tr>
<td>Book and library records</td>
<td>Financial aid and other financial records</td>
</tr>
<tr>
<td>Mental health records and counseling information</td>
<td>Other records related to a student’s day-to-day status</td>
</tr>
<tr>
<td>Any other information in a digital form</td>
<td></td>
</tr>
</tbody>
</table>
file assigned
to a student
Each student
record shall
be identifiable
as to the
source.
Notes and
observations
recorded by
an individual
faculty
member
or other
employee
and kept for
personal
use, are
not official
student
records
except under
the following
conditions:
The
information is
shared with
someone
other than a
substitute for
the employee.
The
information
is used in
preparation
of student
records.
Definition of
Terms
The
following
terms are
interpreted
as indicated:
Eligible
Student - a
student who
attends or
has attended
the College
Custodian -
the Deputy
Chancellor
and the
College
President of
the College
Custodian's
Agent –
Provosts,
Vice
Chancellors,
Associate
Vice Chancellors, Vice Presidents, Deans and those persons appointed by any of these to safeguard or to use student records.

School Official - A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. For purposes of this policy, a "school official" is:

- a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including Campus Police law enforcement unit personnel and health staff) or a person or company with whom the College has contracted as its agent to provide a service (such as an attorney,
auditor, health care professional or diagnostician, IT computer services professional, or insurer) to a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee to a student assisting another school official in performing his or her tasks to a representative of hospitals and clinical sites with whom the College has a contractual relationship that permits students to receive clinical training as part of their educational programs or companies or organizations with whom the College has contracted to provide plagiarism-detection services. Such companies may receive a student's work product for purpose of comparing the student's
work with a reference database
Accuracy of Information
If an eligible student believes that information in his or her educational records is inaccurate or misleading or otherwise violates the student’s privacy, a request for correction may be given in writing to the custodian of the record or other school official who is responsible for the record. If the correction is not made within a reasonable length of time (a maximum of 30 working days), the student may request a hearing. The Dean of Student Development shall serve as the hearing officer; however, if the Dean of Student Development is the custodian of the record in question or otherwise has a direct interest in the outcome of the hearing, then a designee
shall serve as the hearing officer. A hearing must be held within a reasonable time (a maximum of 30 school days, barring unforeseeable circumstances after the request has been made. The hearing officer shall provide the eligible student and the custodian of the record reasonable notice of the date, time and place of the hearing. In advance of the hearing, the custodian of the record shall prepare a packet containing copies of the contested records and any other relevant records or documents, including any applicable policies and procedures. The custodian of the record shall prepare a report summarizing the reasons why he or she believes that the challenged record is not inaccurate or misleading or otherwise a violation of the student’s
privacy. The custodian shall provide the packet and report to the student and hearing officer at least one school day prior to the hearing. The student shall have a full and fair opportunity to present his or her own evidence related to the accuracy of the record. The student, at his or her own expense, may be represented by legal counsel or an advisor. The student's legal counsel or advisor may attend the hearing and confer with the student but may not participate in the hearing. The hearing officer shall prepare a written ruling within a reasonable time after the hearing (a maximum of 21 school days). The ruling must be based solely on the evidence presented at the hearing. The ruling must include a summary of the evidence.
and the reasons for the ruling. If the hearing officer concludes that no correction to the record is warranted, the eligible student is to be notified and informed of the right to place in the records a statement either commenting on or setting forth a reason for disagreeing with the school’s decision. An eligible student who disagrees with the outcome of the hearing may file a complaint with the U.S. Department of Education. The name and address of the office that administers Family Educational Rights and Privacy Act (FERPA) is the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202. A hearing pertaining to student records may be scheduled to challenge the accuracy of recording but not the assignment or merits of a grade.

<table>
<thead>
<tr>
<th></th>
<th>Educational</th>
<th>Miss Tab of Fitness and Wellness</th>
<th>Corrected tab</th>
<th>11/9/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Education</td>
<td>Footnote missing</td>
<td>Added footnote ** MATH 1342 is required for a bachelor's degree in nursing</td>
<td>1/23/2019</td>
</tr>
</tbody>
</table>
Language, Philosophy, and Culture (Humanities) 3 SCH (1 course)
ENGL 2322 A Survey of Early British Literature ENGL 2323 A Survey of Later British Literature ENGL 2327 A Survey of Early American Literature ENGL 2328 A Survey of Later American Literature
ENGL 2332 A Survey of Early World Literature ENGL 2333 A Survey of Later World Literature
ENGL 2341 Literature and Film
ENGL 2351 Mexican-American Literature GEOG 1302 Cultural Geography
HIST 2327 Mexican-American History I HIST 2328 Mexican-American History II
HUMA 1302 Language, Philosophy, and Culture
PHI 1301 Introduction to Philosophy PHIL 2306 Introduction to Ethics

San Jacinto College 2018-2019

1/23/2019
The Retail Management Certificate of Technology program is designed for students who desire to work in leadership roles in the retail industry. This certificate is cross-walked with the retail management industry certification. Most of the courses required for the certificate of technology apply toward an associate of applied science degree in Business Management. First Term Credit

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPO 1311</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1327</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MRKG 1302</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Second Term Credit

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1305</td>
<td>Communications in Management</td>
<td>3</td>
</tr>
<tr>
<td>HRPO 2301</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>ACNT 1303</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MRKG 1302</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1321</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1417</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 2341</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 2422</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 2424</td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Certificate of Technology Total 24

Capstone Experience:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRKG 1302</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Corrected:

**Courses that satisfy this requirement should be selected from Language, Philosophy, and Culture; Creative Arts; and Social and Behavioral Science in the core curriculum.**
<table>
<thead>
<tr>
<th>Page</th>
<th>Technical</th>
<th>Catalog Revisions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Add OSHT 1321 under Approved Electives of (3ENVR-HLTH)</td>
<td>Add EPCT 1301 before EPCT 1305, and Add OSHT 1321 before OSHT 2380</td>
<td>11/12/2018</td>
</tr>
<tr>
<td>28</td>
<td>Missing total: Chief Officer (EFIRE-CHOF)</td>
<td>Added Chief Officer (EFIRE-CHOF)</td>
<td>11/9/2018</td>
</tr>
<tr>
<td>29</td>
<td>*May use ENGL 1302 or ENGL 2311 if transferring to a baccalaureate program. Students who have successfully completed ENGL 1302 or ENGL 2311 may receive credit for ETWR 1302.</td>
<td>Removed 3</td>
<td>11/9/2018</td>
</tr>
<tr>
<td>30</td>
<td>Mental Health-Substance Abuse Counseling (6MH-SAC)</td>
<td>Replaced with: Mental Health-Substance Abuse Counseling (6MH-SAC)</td>
<td>11/9/2018</td>
</tr>
<tr>
<td></td>
<td>Occupational Certificate North Campus First Term Credit DAAC 1311 Counseling Theories 3 DAAC 2341 Counseling Alcohol and Other Drug Addictions 3 PSYT 1371 Mental Health-Substance Abuse Counseling (6MH-SAC)</td>
<td>Occupational Certificate North Campus First Term Credit DAAC 1311 Counseling Theories 3 DAAC 2341 Counseling Alcohol and Other Drug Addictions 3 PSYT 1371 Mental Health-Substance Abuse Counseling (6MH-SAC)</td>
<td>11/9/2018</td>
</tr>
<tr>
<td></td>
<td>Occupational Certificate Total 18 Capstone Experience: DAAC 2366 Note: Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.</td>
<td>Occupational Certificate Total 18 Capstone Experience: DAAC 2366 Note: Students must pass each course listed in the degree or certificate for Mental Health Services with a grade of C or higher to be eligible to receive a degree or certificate.</td>
<td>11/9/2018</td>
</tr>
<tr>
<td>Course</td>
<td>Math Level</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>MATH 1314</td>
<td></td>
<td>College Algebra or Higher or MATH 1332</td>
<td></td>
</tr>
<tr>
<td>MATH 1332</td>
<td></td>
<td>Contemporary Mathematics (Quantitative Reasoning) or MATH 1342</td>
<td></td>
</tr>
<tr>
<td>MATH 1342</td>
<td></td>
<td>Elementary Statistical Methods (Statistics)</td>
<td></td>
</tr>
<tr>
<td>AGRI 2317</td>
<td></td>
<td>Introduction to Agriculture Economics</td>
<td></td>
</tr>
<tr>
<td>AGRI 2317</td>
<td>Math Level</td>
<td>This course covers the fundamental economic principles and their applications in the agricultural industry. Prerequisite: Reading level 7, Writing level 7, Math level 8 (3:3:0)</td>
<td></td>
</tr>
</tbody>
</table>
33  Course  Math Level 7  BIOL 2389  12/3/2018
Academic Cooperative
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the biological sciences/life sciences. In conjunction with class seminars, the individual student will set specific goals and objectives of study of living organisms and their systems.
Prerequisite: Eight hours of biology and/or environment science; Reading level 7, Writing level 7, Math level 8 (3:1-8)

34  Course  Added course  Added course description  12/3/2018
BIOL 1322 Nutrition and Diet Therapy
This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed.
Prerequisite: Reading level 7. Cross-listed as HECO 1322. Credit will only be issued for BIOL 1322 or HECO 1322, not both. (3:3-0)
<table>
<thead>
<tr>
<th>Course</th>
<th>New text</th>
<th>Date</th>
<th>Course</th>
<th>New Text</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2389</td>
<td>Academic Cooperative&lt;br&gt;This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena. Prerequisites: Eight hours of chemistry; Reading level 7, Writing level 7, Math level 8 (3:1-8)</td>
<td>12/3/2018</td>
<td>CHIN 1412</td>
<td>Beginning Chinese II&lt;br&gt;This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Prerequisite: CHIN 1411 (4:3-2)</td>
<td>12/3/2018</td>
</tr>
<tr>
<td>CHIN 1411</td>
<td>Beginning Chinese I&lt;br&gt;This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Prerequisite: Reading level 6 (4:3-2)</td>
<td>12/3/2018</td>
<td>ECON 2301</td>
<td>Principles of Macroeconomics&lt;br&gt;This course covers an analysis of the economy as a whole including measurement and determination of national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, fiscal policy, and monetary policy. Prerequisites: Reading level 7, Writing level 7 and Math level 8 (3:3-0)</td>
<td>12/3/2018</td>
</tr>
<tr>
<td>Course</td>
<td>Math Level</td>
<td>Prerequisites</td>
<td></td>
<td></td>
<td></td>
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<td>------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 2302</td>
<td>7</td>
<td>This is an analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisites: Reading level 7, Writing level 7, Math level 8 (3:3-0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSO 1355</td>
<td></td>
<td>The course covers pathology and pathophysiology of the abdominal structures visualized with ultrasound. Includes abdomen, pelvis and superficial structures. Prerequisites: DMSO 1250, 1110, 1302, 1441, 2405 (3:3-1)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Firefighter Certification V** This is one in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification II, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. **THIS COURSE MAY BE OFFERED ONLY BY INSTITUTIONS CERTIFIED TRAINING FACILITY BY THE TEXAS COMMISSION ON FIRE PROTECTION (TCFP)** 48 lecture hours, 48 hours of skills development. Firefighter Training Academy. Prerequisite: Reading level 6 (4:3-3)
<table>
<thead>
<tr>
<th>Course</th>
<th>New text</th>
<th>12/3/2018</th>
</tr>
</thead>
</table>
| FREN 1411 | Beginning French I
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite: Reading level 6 (4:3-2) |  |
| FREN 1412 | Beginning French II
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite: FREN 1411 (4:3-2) |  |
| GEOL 2389 | Academic Cooperative
This is an instructional program designed to integrate on-campus study with practical hands-on work experience in the physical sciences. In conjunction with class seminars, the individual student will set specific goals and objectives in the scientific study of inanimate objects, processes of matter and energy, and associated phenomena.
Prerequisites: Eight hours of geology; Reading level 7, Writing level 7, Math level 8 (3:1-8) |  |
| GERM 1411 | Beginning German I
This is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture.
Prerequisite: Reading level 6 (4:3-2) |  |
<table>
<thead>
<tr>
<th></th>
<th>Course</th>
<th>Math Level</th>
<th>New text</th>
<th>12/3/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>Course</td>
<td>Math Level</td>
<td>GERM 1412</td>
<td>12/3/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Beginning German II dieses is a fundamental skills course in listening comprehension, speaking, reading, and writing. Includes basic vocabulary, grammatical structures, and culture. Prerequisite: GERM 1411 (4:3-2)</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Course</td>
<td>Math Level</td>
<td>INDS 1311</td>
<td>12/3/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fundamental of Interior Design This course is an introduction to the elements and principles of design, the interior design profession, and the interior design problem-solving process. Prerequisites: Reading level 6, Writing level 6, Math level 8 (3:2-4)</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Course</td>
<td>Math Level</td>
<td>INDS 1315</td>
<td>12/3/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Materials, Methods and Estimating This course is a study of materials, methods of construction and installation, and estimating for interior design applications. Prerequisites: Reading level 6, Writing level 6, Math level 8 (3:2-4)</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Course</td>
<td>Math Level</td>
<td>INDS 1319</td>
<td>12/3/2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Technical Drawing for Interior Designers This course is an introduction to reading and preparing technical construction drawings for interior design, including plans, elevations, details, schedules, dimensions, and lettering. Prerequisites: Reading level 6, Writing level 6, Math level 8 (3:2-4)</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Math Level 7</td>
<td>12/3/2018</td>
<td></td>
<td></td>
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<tr>
<td>--------</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
| IND5 1345 | Commercial Design I  
This course is a study of design principles applied to furniture layout and space planning for commercial interiors.  
Prerequisites: Reading level 6, Writing level 6, Math level 8; and DFTG 1409 (3:2-4) | |
| IND5 1349 | Fundamentals of Space Planning  
This course covers the study of residential and light commercial spaces, including programming, codes, standards, space planning, drawings and presentations.  
Prerequisites: Reading level 6, Writing level 6, Math level 8 (3:2-4) | |
| IND5 1351 | History of Interiors I  
This course is a historical survey of design in architecture, interiors, furnishings, and decorative elements from the ancient cultures through the Italian Renaissance time period and includes a historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings focusing on Egypt, Greece, Italy, Spain, and France.  
Prerequisites: Reading level 6, Writing level 6, Math level 8 (3:2-2) | |
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This course is a work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the College and the employer. It offers experiences external to the College for an advanced student in a specialized field, involving a written agreement between the educational institution and a business or industry. Monitored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the College and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience.

The course may be repeated if topics and learning outcomes vary.

Prerequisites:
Reading level 6, Writing level 6, Math level 8 (3:0-9)

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