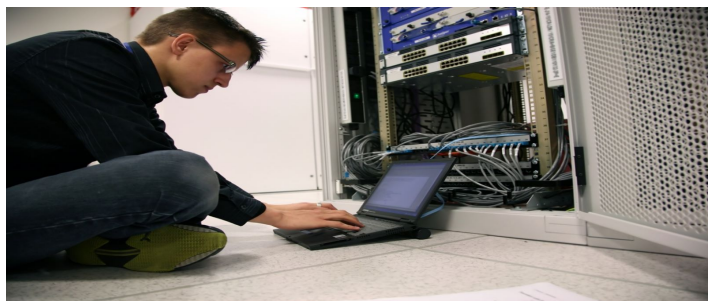


# CIT, NETWORK ADMINISTRATION CISCO SPECIALTY, ASSOCIATE OF APPLIED SCIENCE



## 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 Network Administration 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 them 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 students 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 Network Administration Cisco Specialty is an excellent entry point into future studies leading to careers that include:

- Desktop Support Specialists,
- Helpdesk Supports,
- PC Technicians,
- MS Network Administrators,
- Network Technicians,
- Network Administrators,
- Server Administrators, and
- Network Operations Specialists.

## Earning Potential

Network and Computer Systems Administrators: \$99,4811 per year

Computer Network Support Specialist: \$79,3181 per year<sup>1</sup>

<sup>1</sup> Source: texaswages.com (<https://www.texaswages.com>), median salary Gulf Coast region, 2019

For more information, students may contact Central campus, 281-476-1841.

## Campus

Central Campus

## Information

The Computer Information Technology program is designed primarily for students seeking an Occupational Certificate, Certificate of Technology, or Associate of Applied Science (AAS) degree. Students can expect to complete most CIT certificates in three semesters and AAS degrees in as few as four semesters. 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 semester credit hour Computer Information Technology (CIT) foundations Occupational Certificate before continuing into a Certificate of Technology or AAS degree. Most courses in this Occupational Certificate will apply toward the other CIT certificates and AAS degrees.

The 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 AAS degrees are available in the following areas: Applications Programming, Desktop Support and Network Administration, Information Technology Cyber Security, Simulation and Game Design, Network Administration Cisco, and Web Applications Development.

- The Applications Programming Specialty is for students interested in developing computer programs (designing, coding, testing, and debugging), both stand-alone and web-based, in languages such as C++ and Java as well as gaining skills in the use of Python and SQL. Electives may include courses in C#, Game Design, JavaScript, and mobile app programming. Emphasis is placed on applying the techniques and procedures learned in providing software solutions for both business-related and practical computer problems that are robust, error-free, and easy to use.
- In Desktop Support and Microsoft Network Administration, a student can choose between a track with emphasis on computer hardware (installing, maintaining, repairing, and upgrading) and software support (installing and configuring) or one with focus on installing, configuring, and maintaining computer networks. This program of study prepares students for CompTIA's A+ and Network+ exams as well as other widely recognized industry certifications. Support and network graduates are invaluable in keeping businesses running smoothly.
- 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 Applications Development program prepares students for entry-level positions in website design, web-based applications development, and website 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.

## Network Administration Cisco

The College designed the Network Administration Cisco curriculum 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

Central, North, and South campuses  
3IT-NW-C

First Term		Credits
ITSC 1305	Introduction to PC Operating Systems	3
ITSC 1309	Integrated Software Applications I	3
ITSC 1325	Personal Computer Hardware	3
ITCC 1314	CCNA 1: Introduction to Networks	3
<b>Credits</b>		<b>12</b>

Second Term		Credits
ITSC 1321	Intermediate PC Operating Systems	3
ITCC 1444	CCNA 2: Switching, Routing and Wireless Essentials	4
ITSE 1329 or ITSE 1331	Programming Logic and Design or Introduction to Visual BASIC Programming	3
Select one of the following:		3
MATH 1332	Contemporary Mathematics (Quantitative Reasoning) (or higher)	
MATH 1314	College Algebra (or higher)	
Natural Science		
Choose one of the following:		3
SPCH 1311	Introduction to Speech Communication	
SPCH 1315	Public Speaking	
SPCH 1318	Interpersonal Communication	
SPCH 1321	Business and Professional Speech	
<b>Credits</b>		<b>16</b>

Third Term		Credits
ITSW 1307	Introduction to Database	3
ITCC 2420	CCNA 3: Enterprise Networking, Security, and Automation	4
ITNW 1354	Implementing and Supporting Servers	3
Social and Behavioral Sciences or Government/Political Science or American History		3
ENGL 1301	Composition I	3
<b>Credits</b>		<b>16</b>
Fourth Term		Credits
ITSY 1342	Information Technology Security	3
ITCC 2441	CCNA Security	4
ENGL 2311 or ENGL 1302	Technical and Business Writing or Composition II	3
Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts)		3
Select one of the following:		3
ITSC 2364	Practicum - Computer and Information Sciences, General	
Approved Elective (p. 2)		
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>60</b>

Capstone Experience: ITCC 2441 CCNA Security

### Approved Electives

Code	Title	Credits
ITNW 1345	Implementing Network Directory Services	3
ITSE 1307	Introduction to C++ Programming	3
ITSC 2339	Personal Computer Help Desk	3

\*\*Students must be Texas Success Initiative (TSI) complete in order to graduate: Math Level 8