

CIT, APPLICATIONS PROGRAMMING AND SUPPORT, CERTIFICATE OF TECHNOLOGY



Turn Ideas Into Technology

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 (CIT) 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.

Career Opportunities and Income

Visit the [sanjac.edu](https://www.sanjac.edu/programs/areas-of-study/stem/programming/) (<https://www.sanjac.edu/programs/areas-of-study/stem/programming/>) for information regarding career opportunities and potential earnings in the Greater Houston region.

Learning & Career Pathway

The learning pathway for this career track has a series of related and "stacked" certificates and degrees. You may start at any point on the pathway and earn the certificates on your way to completing the degree.

- CIT, Applications Programming and Support, Certificate of Technology (p. 1) (1.5 years)
- CIT, Applications Programming and Support, Associate of Applied Science (<https://publications.sanjac.edu/areas-study/science-technology-engineering-math/cit-applications-programming-support-aas/>) (2 years)

Career Skills and Learning Outcomes

A student completing the last award in the pathway will be able to:

- Implement a fundamental proficiency in hardware, computer networking, and/or network management.
- Collaborate with management, team members, coworkers, and/or clients to analyze and identify potential solutions to problems.
- Formulate and develop logical and efficient programming solutions based on specifications.
- Develop, test, and debug software applications to perform specific tasks appropriate for the solution.
- Implement solutions using structured, event driven, Object Oriented Programming languages or systems.

- Identify ethical, social, and security issues related to computer programming application development.

Locations

- Central (<https://www.sanjac.edu/about/locations/central/>)
- North (<https://www.sanjac.edu/about/locations/north/>)
- South (<https://www.sanjac.edu/about/locations/south/>)
- Online (<https://www.sanjac.edu/programs/online/>)

College Admission

San Jacinto College is an open admission institution. All students are welcome to apply and will be admitted to the College. You may begin the process on the College's "How to Apply (<https://www.sanjac.edu/admissions/how-to-apply/>)" webpage.

Program Admission

There are no additional admission requirements for this program; you only need to complete your application to the College, as noted in "College Admission" above, and follow the enrollment steps.

Plan of Study

4IT-APPS

First Year

First Term		Credits
ITSC 1305	Introduction to PC Operating Systems	3
ITSC 1325	Personal Computer Hardware	3
ITNW 1325 or ITCC 1314	Fundamentals of Networking Technologies or CCNA 1: Introduction to Networks	3
ITSE 1329	Programming Logic and Design	3
Credits		12

Second Term

ITSE 1302	Computer Programming	3
ITSW 1307	Introduction to Database	3
ITSC 1319	Internet/Web Page Development	3
ITSE 1359	Introduction to Scripting Languages	3
Credits		12

Second Year

First Term		Credits
ITSE 2359	Advanced Computer Programming	3
ITSC 2364 or ITSE 2321	Practicum - Computer and Information Sciences, General or Object-Oriented Programming	3
Approved Elective		3
Credits		9

Total Credits 33

Capstone Experience: ITSE 2359 Advanced Computer Programming

Approved Electives

Code	Title	Credits
GAME 1303	Introduction to Game Design and Development	3
ITSE 1333	Mobile Applications Development	3
ITSE 2309	Database Programming	3
ITSC 1315	IT Project Management	3
ITSC 1316	Linux Installation and Configuration	3

ITSC 1321	Intermediate PC Operating Systems	3
ITNW 1309	Fundamentals of Cloud Computing	3
ITNW 1313	Computer Virtualization	3
ITNW 1354	Implementing and Supporting Servers	3
ITNW 2353	Advanced Routing and Switching	3
or ITCC 1344	CCNA 2: Switching, Routing, and Wireless Essentials	
ITSY 1342	Information Technology Security	3
ITSY 2300	Operating System Security	3
ITSY 2301	Firewalls and Network Security	3