

INFORMATION TECHNOLOGY, ASSOCIATE OF SCIENCE DEGREE

Banner Code: 3_AS_INFOT

Control Number: 20378

Financial Aid Eligible

This program provides students with a solid background in the field of information technology and computer networking. The program courses help students prepare for entry-level information technology positions, such as Network Administrator, Information Technology Support Specialist, and Computer Systems Analyst. Topics include computer networking fundamentals, computer and network security, introductory programming, server administration, and security policies and procedures. The program courses emphasize hands-on and technical writing assignments to help students develop in-demand skills for the information technology workforce.

Program Level Student Learning Outcomes

Upon completion of this program, students will be able to:

1. Demonstrate the ability to locate technical resources to solve problems with networking hardware and software.
2. Demonstrate proficiency with various software packages to solve common networking problems to design and implement a workable solution.
3. Build and maintain secure networks.

Associate Degree Requirements

Unit Requirement

Complete at least 60 units of acceptable college work with a minimum of 12 units completed in residence at Coastline. Earn an overall grade point average of 2.0 or higher from all colleges attended and a 2.0 or higher grade point average at Coastline.

*Students must be in good academic standing (not on probation and/or disqualification) during the semester graduation is petitioned.

Program of Study

Complete the required courses in one of the programs as detailed in the Requirements for the Major section of this catalog. All coursework must be completed with a grade of C or higher.

General Education

Complete one of the three General Education options below (visit the General Education page for details (<https://catalog.cccd.edu/coastline/general-education/>)):

Option 1 – AA/AS Local Degree GE: designed for students pursuing an Associate degree and who may or may not be planning to transfer to a four-year university. The degree is transferable to many colleges and universities.

Option 2—CSU GE Breadth: designed for students who are planning to transfer to a university in the CSU system. It may also

be appropriate for transfer to some independent colleges and universities.

Option 3—IGETC: designed for students who are planning to transfer to a university in the CSU or UC system. It also may be appropriate for transfer to some independent colleges and universities.

Global and Multicultural Studies Requirement

Complete at least 2.5 units from any Global and Multicultural Studies courses. See what courses fulfill the Global and Multicultural Studies Requirement (<https://catalog.cccd.edu/coastline/graduation-requirements/#globalandmulticulturalstudies>).

Course	Title	Units
Required Core		
Complete the following:		
CST C104	IT Fundamentals	3
CST C110	Computer Hardware and Software (A+ Essentials)	4
CST C128	Computer Networking Principles (Network +)	3
CST C158	Contemporary Operating Systems (Server+)	3
CYBR C101	Introduction to Cybersecurity	3
CIS C157	Introduction to Python Programming	3
Electives		
Select two of the following:		
CST C172	SQL Server Design and Implementation	6
CST C177A	MD-100: Windows 10	
CST C177B	Configuring Windows Devices	
CST C191A	Linux Operating System Principles (Linux+)	
CST C198	Amazon Web Services (AWS) Cloud Foundations	
CST C201D	CCNA 1: Introduction to Networks (ITN)	
CST C202D	CCNA 2: Switching, Routing, and Wireless Essentials	
CST C203D	CCNA 3: Enterprise Networking, Security, and Automation	
CST C248B	Wireless Networking	
CST C264	Introduction to Red Hat Linux Administration	
CST C274	Red Hat System Administration 2	
CST C275	Red Hat System Administrator 3	
CST C295	Amazon Web Services Architect Associate	
CST C296	Amazon Web Services Cloud Operations Associate	
CST C297	Amazon Web Services Cloud Developer	
CIS C260	Systems Analysis and Design	
Units Required for Major		25
Requirement		
Local General Education, CSU General Education, or IGETC pattern		Varies
Electives to satisfy unit requirement		Varies
Total Degree Units		60

Information Technology Degree Program Maps

These program maps are recommended examples of all major (program) requirements as well as general education requirements for two-year completion or transfer. These paths may be altered to fit your individual academic needs. These two-year program maps were created by program faculty and counselors and demonstrate recommended paths to completion. **Students are advised to meet with a Coastline Counselor for individualized program planning.**

Your Path to Success

Follow one of the paths to earn your degree in Information Technology in 2 years.

Don't forget to consult a counselor for an education plan!

Path 1 (Information Technology Technician/Computer User Support Specialist)

Course	Title	Units
1st Semester		
ENGL C100	Freshman Composition	4
MATH C160	Introduction to Statistics	4
CMST C101	Fundamentals of Human Communication	3
CST C104	IT Fundamentals	3
CST C158	Contemporary Operating Systems (Server +) *	3
2nd Semester		
HIST C175	United States History since 1876	3
PSYC C100	Introduction to Psychology	3
ART C101	Survey of Art: Renaissance to Contemporary	3
CST C110	Computer Hardware and Software (A+ Essentials) *	4
CST C128	Computer Networking Principles (Network +) *	3
3rd Semester		
BIOL C100	Introduction to Biology	3
ENGL C102	Critical Reasoning, Reading, and Writing	3
PHIL C120	Ethics	3
CIS C157	Introduction to Python Programming *	3
CYBR C101	Introduction to Cybersecurity	3
4th Semester		
ASTR C100	Introduction to Astronomy	3
ASTR C100L	Astronomy Laboratory	1
PSCI C180	American Government	3
SOC C233	Racial and Ethnic Relations in America	3
HLTH C100	Personal Health	3
CST C177A	MD-100: Windows 10	3
CST C177B	Configuring Windows Devices	3

* Also offered in the summer term

Path 2 (Computer Network Support Specialist/Network Administrator)

Course	Title	Units
1st Semester		
ENGL C100	Freshman Composition	4
MATH C160	Introduction to Statistics	4
CMST C101	Fundamentals of Human Communication	3
CST C104	IT Fundamentals	3
CST C158	Contemporary Operating Systems (Server +) *	3
2nd Semester		
HIST C175	United States History since 1876	3
PSYC C100	Introduction to Psychology	3
ART C101	Survey of Art: Renaissance to Contemporary	3
CST C110	Computer Hardware and Software (A+ Essentials) *	4
CST C128	Computer Networking Principles (Network +) *	3
3rd Semester		
BIOL C100	Introduction to Biology	3
ENGL C102	Critical Reasoning, Reading, and Writing	3
PHIL C120	Ethics	3
CIS C157	Introduction to Python Programming *	3
CYBR C101	Introduction to Cybersecurity	3
4th Semester		
ASTR C100	Introduction to Astronomy	3
ASTR C100L	Astronomy Laboratory	1
PSCI C180	American Government	3
SOC C233	Racial and Ethnic Relations in America	3
HLTH C100	Personal Health	3
CST C191A	Linux Operating System Principles (Linux+)	3
CST C248B	Wireless Networking	3

* Also offered in the summer term

Path 3 (Computer Systems Analyst)

Course	Title	Units
1st Semester		
ENGL C100	Freshman Composition	4
MATH C160	Introduction to Statistics	4
CMST C101	Fundamentals of Human Communication	3
CST C104	IT Fundamentals	3
CST C158	Contemporary Operating Systems (Server +) *	3
2nd Semester		
HIST C175	United States History since 1876	3
PSYC C100	Introduction to Psychology	3
ART C101	Survey of Art: Renaissance to Contemporary	3
CST C110	Computer Hardware and Software (A+ Essentials) *	4
CST C128	Computer Networking Principles (Network +)	3

Course	Title	Units
3rd Semester		
BIOL C100	Introduction to Biology	3
ENGL C102	Critical Reasoning, Reading, and Writing	3
PHIL C120	Ethics	3
CIS C157	Introduction to Python Programming *	3
CYBR C101	Introduction to Cybersecurity	3
4th Semester		
ASTR C100	Introduction to Astronomy	3
ASTR C100L	Astronomy Laboratory	1
PSCI C180	American Government	3
SOC C233	Racial and Ethnic Relations in America	3
HLTH C100	Personal Health	3
CST C172	SQL Server Design and Implementation	3
CIS C260	Systems Analysis and Design	3

* Also offered in the summer term

Path 4 (Cloud Technician)

Course	Title	Units
1st Semester		
ENGL C100	Freshman Composition	4
MATH C160	Introduction to Statistics	4
CMST C101	Fundamentals of Human Communication	3
CST C104	IT Fundamentals	3
CST C158	Contemporary Operating Systems (Server +)*	3
2nd Semester		
HIST C175	United States History since 1876	3
PSYC C100	Introduction to Psychology	3
ART C101	Survey of Art: Renaissance to Contemporary	3
CST C110	Computer Hardware and Software (A+ Essentials)*	4
CST C128	Computer Networking Principles (Network +)*	3
3rd Semester		
BIOL C100	Introduction to Biology	3
ENGL C102	Critical Reasoning, Reading, and Writing	3
PHIL C120	Ethics	3
CIS C157	Introduction to Python Programming *	3
CYBR C101	Introduction to Cybersecurity	3
4th Semester		
ASTR C100	Introduction to Astronomy	3
ASTR C100L	Astronomy Laboratory	1
PSCI C180	American Government	3
SOC C233	Racial and Ethnic Relations in America	3
HLTH C100	Personal Health	3
CST C264	Introduction to Red Hat Linux Administration	3
CST C274	Red Hat System Administration 2	3

* Also offered in the summer term

Path 5 (Network Security Administrator)

Course	Title	Units
1st Semester		
ENGL C100	Freshman Composition	4
CST C104	IT Fundamentals	3
MATH C100	Liberal Arts Mathematics	3
CMST C101	Fundamentals of Human Communication	3
CST C158	Contemporary Operating Systems (Server +)*	3
2nd Semester		
HIST C175	United States History since 1876	3
PSYC C100	Introduction to Psychology	3
ART C101	Survey of Art: Renaissance to Contemporary	3
CST C110	Computer Hardware and Software (A+ Essentials)*	4
CST C128	Computer Networking Principles (Network +)*	3
3rd Semester		
BIOL C100	Introduction to Biology	3
ENGL C102	Critical Reasoning, Reading, and Writing	3
PHIL C120	Ethics	3
CIS C157	Introduction to Python Programming *	3
CYBR C101	Introduction to Cybersecurity	3
4th Semester		
ASTR C100	Introduction to Astronomy	3
ASTR C100L	Astronomy Laboratory	1
PSCI C180	American Government	3
SOC C233	Racial and Ethnic Relations in America	3
HLTH C100	Personal Health	3
CST C264	Introduction to Red Hat Linux Administration	3
CST C274	Red Hat System Administration 2	3

* Also offered in the summer term