



COMPUTER INFORMATION SCIENCE, ASSOCIATE IN SCIENCE DEGREE
24 Months – 96.0 Credit Units

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The Associate in Science Degree in Computer Information Science is designed to provide the student with hands-on training in the latest data communications and computer operations technologies. Students in this program must complete the required coursework in the major core from one of the listed areas of elective clusters. The following describes each area of elective clusters.

Programming

The graduate will be familiar with microcomputer applications, programming applications, and design in a programming language. This elective cluster prepares an individual to enter the information technology industry in a variety of job roles, including entry level programmer.

Network Administration

The Network Administration elective cluster enables students to build a solid foundation in the key technologies that drive many of today's corporate networks. Students in this elective cluster will gain hands-on experience with the hardware and software used in personal computers, learn to manage and direct network traffic, and will develop system support skills that focus on installing, administering, and troubleshooting commonly used network hardware and software. This elective cluster helps prepare graduates for careers as Network Administrators, Network Security Administrators, Database Administrators, Network Technicians, Help Desk Technicians, PC Support Specialists, Database Support Specialists, Technical Support Representatives, and more.

Web Design (Online Only)

The Web Design elective cluster covers the essential topics necessary to gain a complete understanding of the latest Internet and web site development technologies. Students learn all aspects of implementing an Internet and/or Intranet web site, including site planning and design, and will practice programming interactive web sites using the latest scripting languages and editing software. Graduates will develop a portfolio of their work and will have the opportunity to enter the job market as entry level web designers in a variety of related positions and job titles.

Course Code	Course	Associate Degree Quarter Credit Hours
College Core Requirements		
SLS 1105	Strategies for Success	4.0
SLS 1321	Career Skills and Portfolio Development	2.0
CGS 2060C	Computer Applications	4.0
Choose one of following courses (students taking Web Design elective cluster must take Project Development and one of the other three choices):		
CEN 1056C	Project Development	2.0
OST 1149L	Keyboarding*	2.0
MAN 2031	Let's Talk Business	2.0
SLS 1505	Basic Critical Thinking	2.0
TOTAL QUARTER CREDIT HOURS:		12.0
FOR WEB DESIGN STUDENTS:		14.0
Major Core Requirements – Programming Elective Cluster		
APA 2111	Principles of Accounting I	4.0
APA 2121	Principles of Accounting II	4.0
BUL 2131	Applied Business Law	4.0
CNT 1003C	Computer Networking Fundamentals	4.0
CTS 1110C	Computer Operating Systems	4.0
CGS 1280C	Computer Hardware Concepts	4.0
COP 2000C	Programming Concepts	4.0
COP 2505C	Fundamental Programming Techniques	4.0
CIS 2321	Introduction to the Systems Development Life Cycle	4.0
	Approved IT Electives**	8.0
Choose one of the following two-course language sequences in Visual Basic or C++ or Java or C# (4.0 credits each).		
COP 2170C	Computer Programming – Visual Basic I	4.0
COP 2171C	Computer Programming – Visual Basic II	4.0

COP 2224C	Computer Programming – C++ I	4.0
COP 2228C	Computer Programming – C++ II	4.0
COP 2250C	Computer Programming – Java I	4.0
COP 2805C	Computer Programming – Java II	4.0
COPP 2280C	Computer Programming – C# I	4.0
COPP 2281C	Computer Programming – C# II	4.0
	PROGRAMMING MAJOR CORE:	52.0
Major Core Requirements – Network Administration Elective Cluster		
CTS 1110C	Computer Operating Systems	4.0
CGS 1280C	Computer Hardware Concepts	4.0
CNT 1003C	Computer Networking Fundamentals	4.0
CTS 1327C	Network Operating Systems-Client	4.0
CTS 1334C	Network Operating Systems-Server	4.0
CET 1605C	Network Routing I	4.0
CET 2607C	Network Routing II	4.0
CTS 2383C	Network Management	4.0
CTS 2386C	Network Infrastructure	4.0
CTS 2303C	Network Directory Services	4.0
CNT 2400C	Network Security Fundamentals	4.0
Choose one of the following two-course network management sequences in Security or Database or other approved IT electives (4.0 credits each).		
CENP 2345C	Network Security	4.0
CISP 2475C	Designing Network Security	4.0
CENP 2420C	Implementing and Administering Databases	4.0
CENP 2450C	Database Design	4.0
	NETWORK ADMINISTRATION MAJOR CORE:	52.0
Major Core Requirements – Web Design Elective Cluster		
CNT 1003C	Computer Networking Fundamentals	4.0
COP 2000C	Programming Concepts	4.0
COP 2505C	Fundamental Programming Techniques	4.0
CGS 1800C	Web Site Design Methodology	4.0
CGS 1821C	Web Content Development	4.0
COP 2840C	Content Generation – Scripting Languages	4.0
CGS 2820C	Web Authoring	4.0
CGS 2877C	Web Animation	4.0
GRA 2125C	Graphic Design Using Adobe Photoshop	4.0
CGS 2177C	E-Commerce Systems Administration	4.0
CGS 2910C	Web Design Portfolio Project	2.0
	Approved IT Electives**	8.0
	WEB DESIGN MAJOR CORE:	50.0
Approved Electives		8.0
To be selected in consultation with the Academic Advisor, Registrar or Academic Dean to achieve a balanced educational program in keeping with the personal objectives and career ambitions of the student.		
General Education Requirements		
ENC 1101	Composition I	4.0
ENC 1102	Composition II	4.0
SPC 2017	Oral Communications*	4.0
MAT 1033	College Algebra	4.0
PSY 2012	General Psychology	4.0
AML 2000	Introduction to American Literature	4.0
	TOTAL GENERAL EDUCATION QUARTER CREDIT HOURS	24.0
TOTAL PROGRAM CREDIT HOURS		96.0

*Course not offered online.

**Approved IT Electives to be selected in consultation with the Academic Advisor, Registrar, or Academic Dean from available coursework in the major (typically those courses with CEN, CIS, CGS, CNT, COP, CTS and CET prefixes).