COMPUTER INFORMATION SCIENCE, BACHELOR OF SCIENCE DEGREE

48 Months – 192.0 Credit Units

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The Bachelor of Science degree in Computer Information Science offers graduates special training in the analysis, design, implementation, maintenance, and use of computer information systems and data base systems. The program focuses on the concepts, principles, goals, functions, and management of information-driven organizations, stressing the development of computer-based applications through the use of programming languages. To ensure graduation with the minimum number of courses, students should choose the CIS Programming elective cluster for their lower division studies.

Course Code	Course	Bachelor's 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 the following courses:		
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 COLLEGE CORE QUARTER CREDIT HOURS	**12.0**
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 two of the two-course language sequences from the choices listed (4.0 credits each).		**16.0**
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
Required Upper Division Courses:		
CIS 3345	Database Concepts I	4.0
COP 3764C	Structured Query Language	4.0
COP 4724C	Database Application Development	4.0
CIS 3615	Designing Secure Software	4.0
CIS 3303C	Object-Oriented Analysis and Design	4.0
CTS 4107	Survey of Operating Systems	4.0

CIS 4329C	Senior Project – System Analysis and Design	4.0
CIS 4328C	Senior Project – Systems Implementation and Integration	4.0
TOTAL PROGRAMMING MAJOR CORE CREDITS		**92.0**
Approved Electives		**32.0**
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. 8.0 credits of the Approved Electives must be upper-division courses.		
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
SYG 2001	Principles of Sociology	4.0
AMH 2030	20th Century American History	4.0
ECO 3007	Macroeconomics	4.0
ECO 3028	Microeconomics	4.0
STA 2014	Statistics	4.0
SOP 4005	Social Psychology	4.0
CPO 4003	Global Politics	4.0
ENC 3211	Report Writing	4.0
TOTAL QUARTER CREDIT HOURS		**56.0**
TOTAL QUARTER CREDIT HOURS REQUIRED FOR GRADUATION		**192.0**

*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, COP, CTS and CET prefixes).