

# B.S. Computer Science

## General Education Requirements for all Bachelor's degrees

### Quality Enhancement Plan (QEP) Requirement

In addition to the course requirements set forth below, each student seeking a B.S. in Computer Science must successfully develop and release a useful program under an open-source model.

We strongly suggest that students seeking the Bachelor of Science in Computer Science plan to take their computer science courses in the following sequence:

#### Bachelor of Science

Freshman — Fall Semester	CSIS 110, CSIS 125
Freshman — Spring Semester	CSIS111, CSIS 225
Sophomore — Fall Semester	CSIS 201, CSIS 211, CSIS 245
Sophomore — Spring Semester	CSIS 215, CSIS 255
Junior — Fall Semester	CSIS 360, CSIS 450, CSIS 495
Junior — Spring Semester	CSIS 375, CSIS upper-division elective
Senior — Fall Semester	CSIS 315, CSIS upper-division elective
Senior — Spring Semester	CSIS 490, CSIS 405

## Required Courses

Item #	Title	credits
CSIS 110	Principles of Computer Programming I	3
CSIS 111	Principles of Computer Programming II	3
CSIS 125	Discrete Structures I	3
CSIS 201	Information Literacy for CS Majors	1
CSIS 211	Data Structures and Algorithms	3
CSIS 215	Object-Oriented Programming in C++	3
CSIS 225	Discrete Structures II	3
CSIS 245	Introduction to Local Area Network Technology	4
CSIS 255	Issues and Practices in Information Security	3
CSIS 315	Application Development for Event-Driven GUI Applications	3
CSIS 360	Operating Systems	3
CSIS 375	Introduction to Robotic Systems	4
CSIS 405	Formal Languages and Automata	3
CSIS 450	Principles of Database Design	3
CSIS 490	Software Engineering	3
CSIS 495	Special Topics Seminar	3
	CSIS Electives Upper Division	6

## Required Cognates

Item #	Title	credits
COMM 115	Discussion Techniques	3
MATH 141	Introduction to Probability and Statistics	3
	<b>Total credits:</b>	<b>60</b>

# Category Descriptions

## CSIS Electives Upper Division

Credits: 6

Item #	Title	credits
CSIS 492	Computer Science Internship	3
CSIS 495	Special Topics Seminar	3