B.S. Computer Science, Emphasis in Cybersecurity

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 with Emphasis in Cybersecurity must satisfy the requirements for the A.S. in Computer Science, as well as successfully develop and release a useful program under an open-source model.

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 360	Operating Systems	3
CSIS 367	System & Network Hardening	3
CSIS 375	Introduction to Robotic Systems	4
CSIS 405	Formal Languages and Automata	3
CSIS 467	Cyber Forensics & Analysis	3
CSIS 490	Software Engineering	3
CSIS 492	Computer Science Internship	3
BUAD 202	Introduction to Contemporary Business	3
CRIJ 311	Criminal Investigations	3

Required Cognates

Item #	Title	credits
COMM 115	Group Communication	3
MATH 141	Introduction to Probability and Statistics	3

Curriculum Guide, Bachelor of Science, Computer Science, Cybersecurity Emphasis

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

Freshman Year, Fall Semester

Item #	Title	credits
CSIS 110	Principles of Computer Programming I	3
CSIS 125	Discrete Structures I	3

Freshman Year, Spring Semester

Item #	Title	credits
CSIS 111	Principles of Computer Programming II	3
CSIS 225	Discrete Structures II	3

1 SWAU 2023-24 Bulletin

Sophomore Year, Fall Semester

Item #	Title	credits
CSIS 201	Information Literacy for CS Majors	1
CSIS 211	Data Structures and Algorithms	3
CSIS 245	Introduction to Local Area Network Technology	4

Sophomore Year, Spring Semester

ltem #	Title	credits
CSIS 215	Object-Oriented Programming in C++	3
CSIS 255	Issues and Practices in Information Security	3

Junior Year, Fall Semester

Item #	Title	credits
CSIS 360	Operating Systems	3
BUAD 202	Introduction to Contemporary Business	3
CRIJ 311	Criminal Investigations	3

Junior Year, Spring Semester

ltem #	Title	credits
CSIS 375	Introduction to Robotic Systems	4
CSIS 367	System & Network Hardening	3

Senior Year, Fall Semester

Item #	Title	credits
CSIS 492	Computer Science Internship	3
CSIS 467	Cyber Forensics & Analysis	3

Senior Year, Spring Semester

Item #	Title	credits
CSIS 405	Formal Languages and Automata	3
CSIS 490	Software Engineering	3
	Total credits:	60

2 SWAU 2023-24 Bulletin