

Cybersecurity BS, Computer Science Emphasis Area

Emphasis Area Requirements

In addition to the 24 credit hours of core required coursework, the B.S. Cybersecurity degree with Computer Science emphasis requires 51-53 credit hours of emphasis-specific course work. Thus, candidates for the B.S. in Cybersecurity degree with Computer Science emphasis must complete a major program of 75-77 (24 core + 51-53 emphasis-specific) credit hours of required courses.

For the Computer Science emphasis all general degree requirements from the College of Arts and Science apply.

MATH 1320	Introduction to Probability and Statistics	3
MATH 1100	Basic Calculus	3-5
or MATH 1800	Analytic Geometry and Calculus I	
MATH 3000	Discrete Structures	3
CMP SCI 2261	Object-Oriented Programming	3
CMP SCI 3010	Web Full Stack Development	3
CMP SCI 3130	Design and Analysis of Algorithms	3
CMP SCI 3260	C/C++ for Advanced Programming	3
CMP SCI 3780	Software Security	3
CMP SCI 4700	Computer Forensics	3
CMP SCI 4730	Computer Networks and Communications	3
CMP SCI 4732	Introduction to Cryptography for Computer Security	3
CMP SCI 4750	Introduction to Cloud Computing	3
CMP SCI 4760	Operating Systems	3
CMP SCI 4782	Information Security	3
CMP SCI 4794	Introduction to Internet of Things	3

Electives**9**

Choose three of the following:

PHIL 1160	Critical Thinking (MOTR PHIL 101)
PHIL 2254	Business Ethics
CRIMIN 1100	Introduction to Criminology and Criminal Justice
CRIMIN 3310	Computers in Criminal Justice
CMP SCI 3990	Undergraduate Internship
CMP SCI 4020	Introduction to Android Apps: Android Fundamentals
CMP SCI 4220	Introduction to iOS Programming and Apps
CMP SCI 4222	iOS Apps
CMP SCI 4300	Introduction to Artificial Intelligence
CMP SCI 4500	Introduction to the Software Profession
CMP SCI 4750	Introduction to Cloud Computing
CMP SCI 4610	Database Management Systems
CMP SCI 4792	Introduction to Mobile Computing, Networking, and Security
INFSYS 3858	Advanced Security and Information Systems
INFSYS 3898	Seminar in Information Systems

Other electives upon approval of Computer Science chair

Total Hours**51-53**

If other departments are affected by this proposal, please secure "sign-offs" and indicate for each department the following:

Department	Contact Person	Phone #	Objections
Information Systems	Dinesh Mirchandani		No

Justification for request:

This is the impact of departmental introductory changes on this emphasis area.