BS in Cybersecurity

Bachelor of Science in

Cybersecurity – Computer Science Emphasis

The program will allow graduates to pursue high-demand work roles such as Cybersecurity Specialist, Cyber Defense Analyst, Cyber Defense Incident Responder, Information Security Analyst, Vulnerability Assessment Analyst, Security Architect, among a variety of other entry to mid-level cybersecurity and computing related roles. The Computer Science emphasis is housed on the department of Computer Science and it focuses on more technical aspects of the field.

The entire program can be completed in the evening, and students starting now will be able to complete the program online. Students must also satisfy all UMSL requirements for a BS degree. Student can also choose to earn one of the available certificates. In addition to university scholarships, the department awards $50k annually in mostly merit-based scholarships.

Required courses	Title	Availability
CMP SCI 1250	Introduction to Computing	O E SFP
CMP SCI 2250	Programming and Data Structures	O E SFP
CMP SCI 2261	Object-Oriented Programming	O E SFP
CMP SCI 2700	Computer Organization and Architecture	O E SFP
CMP SCI 2750	System Programming and Tools	O E SFP
CMP SCI 3010	Web Programming	O E SFP
CMP SCI 3130	Design and Analysis of Algorithms	O E FP
CMP SCI 3702	Cyber Threats and Defense	O E FP
or INFSYS 3848	or Introduction to Information Security	O FP
CMP SCI 3780	Software Security	O E P
CMP SCI 4700	Computer Forensics	O E F
CMP SCI 4730	Computer Networks and Communications	O E FP
CMP SCI 4732	Introduction to Cryptography for Computer Security	O E S
CMP SCI 4750	Introduction to Cloud Computing	O E SFP
CMP SCI 4760	Operating Systems	O^{1}E F
CMP SCI 4782	Information Security	O^{1}E P
CMP SCI 4794	Introduction to Security of IoT Systems	O^{1}E F
INFSYS 3868	Secure Software Development	O FP
INFSYS 3878	Inf. Security Risk Management and Business Continuity	O FP
MATH 1100	Basic Calculus	O E SFP
or MATH 1800	Analytic Geometry and Calculus I	O E SFP
MATH 1320	Introduction to Probability and Statistics	O E SFP
MATH 3000	Discrete Structures	O E SFP
ENGL 3120	Business Writing	O E SFP
or ENGL 3130	or Technical Writing	O E SFP
Additional electives		
Three more courses from a predefined list – substitutions can be requested.		

For more information visit umsl.edu/cs. For careers visit umsl.edu/cs/careers.

This document http://umsl.edu/cs/undergraduate-studies/BSCS_Flyer.pdf

Availability: Online as of FS2020 (**O** O), Evening (**E** E), Summer (**S**), Fall (**F**), Spring (**P**). O^1 – 2021.

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