

CYBERSECURITY MANAGEMENT CERTIFICATE

The Cybersecurity Management Certificate is designed to provide students with the technical and management skills necessary to work in the Cybersecurity field. Students will use Cybersecurity skills as a consultant or as an employee helping an organization to develop and implement a Cybersecurity program or respond to security incidents. Students will explore a variety of knowledge areas of Cybersecurity Management and apply that knowledge in a project in the capstone course. The curriculum is based on the Core Knowledge Units developed by the National Security Agency (NSA) and the Department of Homeland Security (DHS). Students will gain skills in programming; networking technology & protocols; databases & analytics; probability & statistics; policy, legal, ethics, and compliance; cybersecurity fundamentals & practices, and cybersecurity management & planning.

Post-secondary Certificate - Cybersecurity Management

Summary

Code	Title	Hours
	Foundation Course: Network, Protocols, & Sys. Admin. Knowledge Pathway	3
	Programming & Scripting Knowledge Pathway	3
	Databases, Analytics, & Statistics Knowledge Pathway	3
	Policy, Legal, Ethics, & Compliance Knowledge Pathway	3
	Cybersecurity Management & Planning Knowledge Pathway	3
	Capstone Course: Cybersecurity Fundamentals & Practices Knowledge Pathway	3
Total Hours		18

Degree Specific Credits: 18

Required Cumulative GPA: 3.0

Foundation Course: Network, Protocols, & Sys. Admin. Knowledge Pathway

Code	Title	Hours
Complete one of the following courses:		
BMIS 471	Fundamentals of Network & Security Management	3
CSCI 466	Networks	
CSCI 476	Computer Security	
	or CSCI 574 Computer Security	
ITS 214	Network OS - Infrastructure	
Total Hours		3

Minimum Required Grade: C-

Programming & Scripting Knowledge Pathway

Code	Title	Hours
Complete one of the following courses:		
BMIS 365	Business App Development	3
BMIS 465	Introduction to Real-time Data Analytics	
CSCI 150	Introduction to Computer Science	
CSCI 151	Interdisciplinary Computer Science I	
CSCI 152	Interdisciplinary Computer Science II	
CSCI 258	Web Application Development	
Total Hours		3

Minimum Required Grade: C-

Databases, Analytics, & Statistics Knowledge Pathway

Code	Title	Hours
Complete one of the following courses:		
BMIS 326	Introduction to Data Analytics	3
BMIS 370	Managing Information and Data	
CSCI 232	Intermediate Data Structures and Algorithms	
CSCI 340	Database Design	
CSCI 444	Data Visualization	
Total Hours		3

Minimum Required Grade: C-

Policy, Legal, Ethics, & Compliance Knowledge Pathway

Code	Title	Hours
Complete one of the following courses:		
ACTG 321	Accounting Information Systems I	3
BGEN 220E	Business Ethics and Social Responsibility	
BGEN 361	Principles of Business Law	
CSCI 215E	Social & Ethical Issues in CS	
CSCI 315E	Computers, Ethics, and Society	
Total Hours		3

Minimum Required Grade: C-

Cybersecurity Management & Planning Knowledge Pathway

Code	Title	Hours
Complete one of the following courses:		
BMIS 476	Integrated Project Management for IS	3
BMIS 478	E Commerce: a Managerial Perspective	
BMIS 479	Introduction to Consulting	

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BMIS 482	Big Data Project	
CSCI 400	Digital Entrepreneurship	
Total Hours		3

Minimum Required Grade: C-

Capstone Course: Cybersecurity Fundamentals & Practices Knowledge Pathway

Code	Title	Hours
Complete the following course:		
BMIS 472	Advanced Network & Security Management	3
Total Hours		3

Minimum Required Grade: C-