

Master's of Science in Cybersecurity

Effective Fall 2022 term and prior (subject to change)

Required courses - 9 credits:

Student must obtain a grade of C or better in these courses.

A grade of C- is not acceptable. *Overall GPA must remain above a 3.0 in order to graduate.*

Required courses				
<i>Course # & name:</i>	<i>Credits:</i>	<i>Term & Year:</i>	<i>Grade:</i>	<i>Comments/Professor:</i>
CIS 5370: Principles of Cybersecurity	3			
CIS 5371: Introduction to Cryptography	3			
CIS 5374: Cybersecurity & Privacy: Attacks & Defenses	3			

Focus Area - 12 credits:

Non- thesis students must select 4 courses from one focus area that aligns with their interest and backgrounds.

Required courses				
<i>Course # & name:</i>	<i>Credits:</i>	<i>Term & Year:</i>	<i>Grade:</i>	<i>Comments/Professor:</i>
	3			
	3			
	3			
	3			

Systems Concentration Area:

CEN 5079: Software Vulnerabilities and Security
CIS 5373: Systems Security
CIS XXXX: Anonymity & Privacy (TBA)
EEL 6787: Network Security
EEE 5718: Internet of Things & Privacy
EEL 6805: Advanced Malware Reverse Engineering

Applications Concentration Area:

CNT 5415: Practical Applied Security
CIS 5208: Social, Eco, & Policy Aspects of CyberSecurity
EEL 6803: Advanced Digital Forensics
TCN 6880: Telecom Public Policy Development & Standards
ISS 5135: National Security Essentials
PAD 6379: Homeland Security Risk Assessment
PAD 6399: Homeland Sec Man for State/Local Gov
ISM 6326: Information Security and Compliance
ISM 6328: Information Security Management

ELECTIVE COURSEWORK - 9 credits:

Electives can be chosen from either of the focus areas above or from the courses below. Thesis track students should select 6 credits of thesis to be used here.

Courses offered by School of Computing and Information Sciences:			
<i>Course # & name:</i>	<i>Credits:</i>	<i>Grade:</i>	<i>Term & Year:</i>
CAP 5610: Introduction to Machine Learning	3		
CAP 5640: Introduction to Natural Language Processing	3		
CAP 5768: Introduction to Data Science	3		
CAP 5771: Principles of Data Mining	3		
CAP 6778: Advanced Topics in Data Mining	3		
TCN 5080: Secure Telecomm Transactions	3		
TCN 6430: Networks Management and Control Standards	3		
TCN 5271: Ubiquitous & Embedded Sensor Network-Centric Telecommunications	3		
EEL 5278: Smart Grid Cyber Security and Intelligent Electronic Devices	3		

Thesis option: After completion of the other required courses, the student must conduct a research thesis. The topic must first be approved by the faculty member who will supervise the research and then by the Thesis Committee. The thesis will be accepted only after being read and approved by a Thesis Committee. An oral defense is required before the Thesis Committee