

# NETWORKING AND INFRASTRUCTURE CONCENTRATION, CYBERSECURITY (MS)

## Course Requirements

### Introductory Courses

Course	Title	Quarter Hours
CSEC 418	INTRODUCTION TO HOST SECURITY	4
NET 405	NETWORK FUNDAMENTALS	4
NET 411	INTRODUCTION TO COMPUTER AND NETWORK SYSTEMS	4
NET 413	INTRODUCTION TO LAN TECHNOLOGIES	4

### Foundation Courses

Course	Title	Quarter Hours
CSEC 440	INFORMATION SECURITY MANAGEMENT	4
CSEC 445	HUMAN-CENTERED CYBERSECURITY	4
CSEC 450	DIGITAL FORENSIC TECHNIQUES	4
NET 463	COMPUTER NETWORKS AND DATA SYSTEMS	4
NET 477	NETWORK SECURITY	4

### Advanced Courses

A maximum of four (4) Advanced Courses can be taken before completing the Foundation Courses and fulfilling the GPA Requirement.

Course	Title	Quarter Hours
CSEC 488	SECURITY TESTING AND ASSESSMENT	4
CSEC 533	ENTERPRISE SECURITY INFRASTRUCTURE CONTROLS AND REGULATORY COMPLIANCE	4
NET 577	NETWORK SECURITY II	4
Select one of:		4
NET 511	TELECOMMUNICATIONS PRACTICUM	
CSEC 489	ADVANCED CYBER ATTACK RESPONSES AND DEFENSES	

### Major Elective Courses

Students must complete **eight (8) Credit Hours of CSEC or NET courses in the range of 420 or higher**. That course cannot be used to fulfill a student's Concentration Area or Foundation Courses requirements.

### Capstone Options

Four (4) credit hours are required for the capstone requirement. Students have the option of completing the Computer, Information and Network Security Capstone course (4 credit hours) or the Network Capstone course (4 credit hours) or completing a Master's Research Project (up to 8 credit hours) to fulfill their Capstone requirement. If a student chooses to complete a Master's Research project for 8 credit hours, 4 credit hours

of CSC 695 replace one major elective course in the M.S. in Cybersecurity program. A student who completes a Master's Research project also has the option of completing a Master's Thesis.

### Computer, Information and Network Security Capstone Course

- CSEC 594

### Network Capstone Course

- NET 594

### Master's Research

- Students interested in a more-in-depth study of a particular area can choose to work with a faculty member (not necessarily their academic advisor) on an independent study or research project. The student will register for up to 8 credit hours of CSC 695. If a student chooses to complete a Master's Research project for 8 credit hours, 4 credit hours of CSC 695 replace one major elective course in the M.S. in Cybersecurity program.

### Master's Thesis

- A student who has made an original contribution to the area (typically, through work done by CSC 695) may choose to complete a Master's Thesis. The student and the student's research advisor should form a Master's Thesis Committee of 3 faculty. The student will need to submit to the committee a thesis detailing the results of the research project. After a public defense, the committee will decide whether to accept the thesis. In that case, the student will be allowed to register for the 0 credit course CSC 698 and the transcript will show the thesis title as the course topic.