

CYBERSECURITY MINOR REQUIREMENTS

COMPSCI 271	COMPUTER ORGANIZATION AND ASSEMBLY PROGRAMMING	3
Total Units		15

This minor program aims to provide education on both security operations and security system design/implementation. The students in this program will not only learn about operational security in penetration testing, vulnerability analysis, system administration, intrusion detection, and incident response, but also learn design and implementation of security features in the areas of cryptography-based secure network protocol design, secure operating system design, and secure software design.

The minor could be taken by both Computer Science and non-Computer Science majors, with a certain number of prerequisite courses required depending on one's background in programming and mathematics.

Code	Title	Units
Minor Requirements - 24 units		
COMPSCI 354	INTRUSION DETECTION AND INCIDENT RESPONSE	3
COMPSCI 455	CRYPTOGRAPHY AND NETWORK SECURITY	3
COMPSCI 456	COMPUTER SYSTEM SECURITY	3
ITSCM 221	INFORMATION TECHNOLOGY INFRASTRUCTURE	3
or COMPSCI 460	COMPUTER NETWORKING	
ITSCM 331	SYSTEM ADMINISTRATION AND SECURITY	3
ITSCM 452	INFORMATION ASSURANCE AND SECURITY	3
Select 6 units from:		6
CYBER 101	INTRODUCTION TO CYBERSECURITY	
CYBER 358	SECURITY OPERATIONS IN THE CLOUD	
CYBER 459	SYSTEMS SECURITY ENGINEERING	
COMPSCI 342	DIGITAL FORENSICS	
COMPSCI 353	CYBERSECURITY LAW AND POLICY	
COMPSCI 441	WEB SECURITY	
COMPSCI 452	MALWARE ANALYSIS	
COMPSCI 481	WEB SERVER AND UNIX ADMINISTRATION	
ITSCM 332	NETWORK MANAGEMENT	
ITSCM 444	IT SECURITY ANALYTICS	
Total Units		24

Code	Title	Units
Unique Requirements		
COMPSCI 172	INTRODUCTION TO JAVA	3
or COMPSCI 174	INTRODUCTION TO C++	
COMPSCI 215	DISCRETE STRUCTURES	3
or MATH 280	DISCRETE MATHEMATICS	
COMPSCI 220	INTERMEDIATE JAVA	3
or COMPSCI 221	INTERMEDIATE PROGRAMMING IN C#	
or COMPSCI 222	INTERMEDIATE C++	
COMPSCI 223	DATA STRUCTURES	3