

CYBERSECURITY - COMPREHENSIVE EMPHASIS REQUIREMENTS (BS)

Code	Title	Units
Major Requirements		
Foundations:		
CYBER 101	INTRODUCTION TO CYBERSECURITY	3
COMPSCI 220	INTERMEDIATE JAVA	3
or COMPSCI 221	INTERMEDIATE PROGRAMMING IN C#	
or COMPSCI 222	INTERMEDIATE C++	
COMPSCI 223	DATA STRUCTURES	3
COMPSCI 271	COMPUTER ORGANIZATION AND ASSEMBLY PROGRAMMING	3
COMPSCI 460	COMPUTER NETWORKING	3
Core Knowledge and Skills:		
COMPSCI 342	DIGITAL FORENSICS	3
COMPSCI 353	CYBERSECURITY LAW AND POLICY	3
COMPSCI 354	INTRUSION DETECTION AND INCIDENT RESPONSE	3
COMPSCI 424	OPERATING SYSTEMS	3
COMPSCI 455	CRYPTOGRAPHY AND NETWORK SECURITY	3
COMPSCI 456	COMPUTER SYSTEM SECURITY	3
ITSCM 331	SYSTEM ADMINISTRATION AND SECURITY	3
ITSCM 332	NETWORK MANAGEMENT	3
Integration and Application:		
CYBER 459	SYSTEMS SECURITY ENGINEERING	3
ITSCM 452	INFORMATION ASSURANCE AND SECURITY	3
Cybersecurity Electives:		12
COMPSCI 332	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	
COMPSCI 381	JAVASCRIPT AND DHTML	
COMPSCI 382	SERVER-SIDE SCRIPTING	
COMPSCI 433	THEORY OF ALGORITHMS	
COMPSCI 441	WEB SECURITY	
COMPSCI 452	MALWARE ANALYSIS	
COMPSCI 461	MOBILE COMPUTING ARCHITECTURE	
COMPSCI 481	WEB SERVER AND UNIX ADMINISTRATION	
CYBER 358	SECURITY OPERATIONS IN THE CLOUD	
ITSCM 314	DATABASE DESIGN AND ADMINISTRATION	
ITSCM 385	AGILE PROJECT MANAGEMENT	
ITSCM 444	IT SECURITY ANALYTICS	
MATH 452	INTRODUCTION TO ABSTRACT ALGEBRA	
Total Units		57

or COMPSCI 174	INTRODUCTION TO C++	
COMPSCI 215	DISCRETE STRUCTURES	3
or MATH 280	DISCRETE MATHEMATICS	
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 371	WRITING IN THE SCIENCES	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	
MATH 250	APPLIED CALCULUS SURVEY FOR BUSINESS AND SOCIAL SCIENCES	5
or MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	
STAT 342	APPLIED STATISTICS	3

Code	Title	Units
Unique Requirements		
COMPSCI 172	INTRODUCTION TO JAVA	3