

CYBERSECURITY - CYBER OPERATIONS EMPHASIS REQUIREMENTS (BS)

This emphasis of the Cybersecurity major is open only to students who have completed an Associate of Applied Science degree in Information Technology or Cybersecurity from an institution that has an articulation agreement with UW-Whitewater. This 60 unit emphasis combines a specially designed 42 unit Cybersecurity major with 18 units of approved Applied Technical Skills courses transferred from the technical college. Students will also complete a set of unique requirements to ensure the necessary proficiency in mathematics and writing.

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
ITSCM 332	NETWORK MANAGEMENT	3
or COMPSCI 460	COMPUTER NETWORKING	
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 455	CRYPTOGRAPHY AND NETWORK SECURITY	3
COMPSCI 456	COMPUTER SYSTEM SECURITY	3
ITSCM 331	SYSTEM ADMINISTRATION AND SECURITY	3
or COMPSCI 481	WEB SERVER AND UNIX ADMINISTRATION	
Integration and Application:		
CYBER 459	SYSTEMS SECURITY ENGINEERING	3
ITSCM 452	INFORMATION ASSURANCE AND SECURITY	3
Cybersecurity Electives:		3
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	
COMPSCI 424	OPERATING SYSTEMS	
COMPSCI 433	THEORY OF ALGORITHMS	
COMPSCI 441	WEB SECURITY	
COMPSCI 452	MALWARE ANALYSIS	
COMPSCI 460	COMPUTER NETWORKING	
COMPSCI 461	MOBILE COMPUTING ARCHITECTURE	
COMPSCI 481	WEB SERVER AND UNIX ADMINISTRATION	
CYBER 358	SECURITY OPERATIONS IN THE CLOUD	
ITSCM 331	SYSTEM ADMINISTRATION AND SECURITY	
ITSCM 332	NETWORK MANAGEMENT	
ITSCM 385	AGILE PROJECT MANAGEMENT	

ITSCM 444	IT SECURITY ANALYTICS	
Total Units		42
Code	Title	Units
Applied Technical Skills		18
Approved information technology courses transferred under an articulation agreement with a technical college		
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	
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 371	WRITING IN THE SCIENCES	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	
STAT 230	INTRODUCTION TO STATISTICAL REASONING AND ANALYSIS	3
or STAT 342	APPLIED STATISTICS	