CYBER DEFENSE CONCENTRATION

Cybersecurity, Bachelor of Science in Cybersecurity - Cyber Defense Concentration Requirements

Code	Title	Credits
General Education Requirements - 34 Hours Required		
Minimum of "C-"required		
Fundamental Skills		**15**
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
Oral Communication – 3 hrs.		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
Quantitative Literacy – 3 hrs.		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
Data Literacy – 3 hrs.		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
Breadth of Knowledge		**13**
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
Individual and Social Responsibility		**6**
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
MAJOR REQUIREMENTS - 71 Hours Required		
**Course will satisfy UNO's General Education Requirement		
^Course requires pre-requisite(s)		
All of the Following		**53**
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY (**)	
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I (^)	
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II (^)	
MATH 1950	CALCULUS I (^)	
ACMP 2000	DATA ANALYSIS AND MACHINE LEARNING (^)	
CSCI 2030	MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE (^)	
or MATH 2030	DISCRETE MATHEMATICS	
CYBR 2250	LOW-LEVEL PROGRAMMING (^)	
CYBR 2600	SYSTEM ADMINISTRATION (^)	
CYBR 3050	PRINCIPLES OF CYBER OPERATIONS AND DEFENSE (^) [1]	
CIST 3110	INFORMATION TECHNOLOGY ETHICS (** ^)	
CSCI 3320	DATA STRUCTURES (^)	
CSCI 3550	COMMUNICATION NETWORKS (^)	
CYBR 3570	CRYPTOGRAPHY (^)	
CYBR 3600	CYBERSECURITY POLICY AND AWARENESS (^)	
CSCI 3720	COMPUTER ORGANIZATION (^)	
CSCI 4500	OPERATING SYSTEMS (^)	
CYBR 4580	CAPSTONE (^)	
Cyber Defense Concentration Core - complete all of the following:		**9**
CYBR 4380	DIGITAL FORENSICS	
CYBR 4390	MOBILE DEVICE FORENSICS	
CYBR 4460	ETHICAL HACKING - NETWORK ANALYSIS	
Cyber Defense Concentration Extension - complete 9 credits selected from:		**9**
CYBR XXXX	Any course with CYBR subject prefix not counted elsewhere in the plan of study, including lower or upper level CYBR transfer coursework	
CSCI 3660	THEORY OF COMPUTATION	
CSCI 4560	NUMBER THEORY & CRYPTOGRAPHY	
CSCI 4650	INTRODUCTION TO CLOUD COMPUTING	
ELECTIVES		
#Elective hours as required to reach a total of 120 hours		

[1] Students who have previously earned credit for CYBR 4360 may substitute CYBR 4360 and PSCI 4260 in place of CYBR 3050.