

#### Cybersecurity

Associate in Science | Code: 25079 | 60 credits

CIP (1511100308)

Effective Term: Spring 2025 (2253)

The Cybersecurity program prepares students to fill a critical and growing need for cybersecurity personnel through hands-on experience along with simulation training and group/team-based learning to simulate a professional work environment. The program covers a wide range of topics including cybersecurity fundamentals, computer forensics and network security. Upon completion of the program, the student will have learned to evaluate security trends, recognize best practices, and understand IT security products and threats. Additionally, the curriculum is designed to aid students in preparing for many of the certification exams in the field.

## **GENERAL EDUCATION REQUIREMENTS (15.00 Credits)**

### **COMMUNICATIONS (3.00 credits)**

ENC 1101 English Composition (3 credits) Prerequisite: Student must meet the

Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or

eligible exemption).

#### **HUMANITIES (3.00 credits)**

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	

### **MATHEMATICS (3.00 credits)**

MAC 1105 College Algebra	(3 credits)	Prerequisite: MAT 1033 •
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STA 2023 Statistical Methods (3 credits) Prerequisite: MAT 1033 • or MGF 1131

# NATURAL SCIENCE (3.00 credits)

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AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
GLY 1010	Physical Geology	(3 credits)
OCE 1001	Introduction to Oceanography	(3 credits)
PHY 1020	General Education Physics	(3 credits)

## **SOCIAL SCIENCE (3.00 credits)**

AMH 2010	History of the US to 1877	(3 credits)
AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

#### **COMPUTER COMPETENCY**

Test type(s) needed:

Computer Competency Test (CCT)

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CGS 1060C Introduction to Computer Technology and Applications

<sup>•</sup>Note: Students must seek advisement for proper mathematics course from discipline chairperson.

MAJOR COURSE	REQUIREMENTS (20.00 credits)				
CGS 1060C	Introduction to Computer Technology and Applications	(4 credits)			
CGS 1700	Introduction to Operating Systems	(4 credits)			
CIS 1531	Introduction to Secure Scripting	(4 credits)			
CTS 1120	Cybersecurity Fundamentals	(4 credits)	Recommended preparation: prior		
			knowledge of networking technologies		
CTS 1134	Networking Technologies	(4 credits)			
PROGRAM COURSE REQUIREMENTS (16.00 credits)					
CET 2880C	Digital Forensics	(4 credits)			
CIS 2350	Cybersecurity Analysis	(4 credits)	Prerequisites: CTS 1120 and CTS 1134		
CTS 1111	Linux +	(4 credits)			
CTS 2314	Network Defense and Countermeasures	(4 credits)	Prerequisites: CTS 1120 and CTS 1134 or		
			CTS 1650		
PROGRAM COURSE ELECTIVE (9.00 credits)					
CAI*, CGS*, CIS*	, COP*, CTS*	(4 credits)			
CIS 2619	Secure Software Development	(4 credits)	Prerequisites: COP 2800;		
			Corequisite: COP 2805C		
CIS 2900	Directed Information Technology Study	(1-4 credits)			
CJE 1680	Introduction to Computer Crimes	(3 credits)			
CJL 2062	Constitutional Law & Legal Procedure	(3 credits)			
COP 1334	Introduction to C++ Programming	(4 credits)			
COP 2800	Java Programming	(4 credits)	Prerequisite: COP 1334		
COP 2805C	Java Programming 2	(4 credits)	Prerequisite: COP 2800		
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CTS 1145	Cloud Essentials	(4 credits)			
CTS 1145 CTS 2303		,			
	Cloud Essentials	(4 credits)	Prerequisites: CTS 1120 and CTS 1134		

<sup>\*</sup>Any course with the listed prefixes satisfies this requirement.