

COMPUTER INFORMATION SYSTEMS CYBERSECURITY AND INFORMATION ASSURANCE

Business Division

The associate of applied science degree in computer information systems with a program designation of cybersecurity and information assurance is designed to provide an opportunity for students to acquire the foundational skills needed for an entry-level position supporting corporate security operations. The term "information assurance" encompasses the scientific, technical and management disciplines required to ensure computer and network security.

Career Opportunities

Graduates of this program will potentially be prepared for entry-level employment as:

- Computer emergency response team operations
- Computer forensics
- Cyber crime investigation
- Cryptography
- Defensive information operations
- Information assurance systems and product acquisition
- Information assurance training education and management
- Systems/network administration and operation
- Threat and vulnerability assessment (includes risk management)
- Threat intelligence
- Web security

For more information, please see the following link on the Bureau of Labor Statistics website: <http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>.

Transfer Information

This program was designed to transfer to institutions offering four-year degrees. There is a significant financial advantage in following this path. Monroe County Community College and Eastern Michigan University have an articulation agreement that will maximize transferability. For more information, go to https://www.emich.edu/ccr/documents/curreguidenew/monroe/monroe_informationassurance.pdf?v=2018-05-08T16:36:24Z.

For information regarding transfer opportunities for this or any program, please visit the Transfer section of the MCCC website.

Note: The following codes identify courses that satisfy MCCC's General Education Requirements:

- (C1) GE Natural Sciences Competency
- (C2) GE Mathematics Competency
- (C3) GE Writing Competency
- (C4) GE Computer Literacy Competency
- (C5) GE Human Experience Competency
- (C6) GE Social Systems Competency

Required General Education Courses	Credits
19-20	
C1 Natural Science Competency	4
C2 Mathematics Competency*	3-4
C3 ENGL 151 (English Composition I)	3
C4 CIS 130 (Introduction to Computer Information Systems)	3
C5 Expressions of the Human Experience Competency	3
C6 Social Systems Competency	3

*MATH 126 (Mathematics for Business) is recommended for students whose goal is to complete the AAS degree and seek employment. MATH 151 (Intermediate Algebra) or higher is recommended for students interested in transferring.

See the General Education Requirements on page 35 or the college website (www.monroecc.edu) for a list of courses that satisfy the General Education Learning Competencies.

Required CIS Core Courses	Credits
9	
CIS 130 (Introduction to Computer Information Systems)	C4
CIS 208 (PC Operating Systems)	3
CIS 209 (Network Concepts)	3
IAS 103 (Information Security Principles)	3

Cybersecurity Concentration	Credits
19	
CIS 150 (Computer Science I)	4
CIS 228 (Linux Administration)	3
CIS 230 (Windows Server)	3
IAS 202 (Risk Vulnerability Analysis)	3
IAS 210 (Advanced Networking Practices)	3
IAS 213 (Privacy and Technology)	3

Additional General Electives	12-13
(as required to complete 60 hours)	

Total Degree Requirements	60 credits
Total Degree Cost	61 minimum billable contact hours

Certificate Program: Cybersecurity and Information Assurance

Required Courses	Credits
CIS 130 (Introduction to Computer Information Systems)	3
CIS 208 (PC Operating Systems)	3
CIS 209 (Network Concepts)	3
CIS 230 (Windows Server)	3
IAS 103 (Information Security Principles)	3
IAS 202 (Risk Vulnerability Analysis)	3
IAS 210 (Advanced Networking Practices)	3
IAS 213 (Privacy and Technology)	3

Total Certificate Requirements	24 credits
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