

CYBERSECURITY, ASSOCIATE OF APPLIED SCIENCE

Program Description

The Computer Information Systems: Cybersecurity program is a two-year sequence of classes designed to prepare the student for employment in the computer/cybersecurity employment area. Further, this degree adds hands-on training in ethical hacking, computer hardware, computer forensics and security operations, cloud services, virtualization, switches, and routers. Students will also learn to program in a high-level programming language and to apply programming concepts in a variety of environments. Students will become proficient as a user and manager of server and desktop operating systems, switches, routers, and database systems. Finally, the program develops critical thinking along with verbal and written communication skills.

Program Outcomes

Students who successfully complete the Associate of Applied Science in Cybersecurity will:

1. Develop critical thinking and problem-solving skills by working with hardware, networks, and software through programming logic and hands-on lab assignments.
2. Install and configure various operating systems.
3. Use Microsoft Office applications to solve common business problems.
4. Employ common cybersecurity practices to eliminate or mitigate threats.
5. Demonstrate the skills necessary for entry-or mid-level employment in the cybersecurity field.

Career Considerations

The Computer Information Systems: Cybersecurity program is designed to prepare the student for employment in the computer/cybersecurity employment area. Job titles include computer programmer, computer support technician, cybersecurity technician, network administrator, or web designer, while developing general problem-solving and troubleshooting skills that can be applied to business, computer, networking, server, and web environments.

Program Course Requirements

Course	Title	Credits
First Year		
First Term		
CIS 120	Intro to Digital Literacy	4
CIS 122	Orientation to Programming	4
CIS 140M	Intro to MS Operating Systems	4
MTH 110	Foundations for Precalculus (or higher)	4
Credits		16
Second Term		
CIS 133CS	Intro to Programming I	4
CIS 240M	Windows Server Admin I	4
PSY 101	Psychology of Human Relations	3
WR 121Z	Composition I ¹	4
Credits		15
Third Term		
CIS 151C	Introduction to Networks	4

CIS 233CS	Intro to Programming II	4
CIS 275	Intro to Database Mgmt Sys I	4
CIS 279M	Windows Server Admin II	4
Credits		16
Second Year		
First Term		
CIS 152C	Switch Rout Wireless Ess	4
CIS 195	Authoring for the Web I	4
CIS 276	Intro to Database Mgmt Sys II	4
CIS 288M	Windows Server Admin III	4
Credits		16
Second Term		
CIS 153C	Ent Netwrk Security Automation	4
CIS 284	Network Security Fundamentals	4
CIS 285A	Ethical Hacking	4
CIS 295	Authoring for the Web II	4
Credits		16
Third Term		
CIS 145	Computer Forensics	4
CIS 280	CWE-CIS ²	2
CIS 285C	Cloud Services Technologies	3
COM 111Z or COM 218Z	Public Speaking or Interpersonal Communication	4
Credits		13
Total Minimum Credits		92

¹ A grade of "C" or better must be attained in the course(s) indicated.

² Student can take CIS 280 during the summer term as desired.

Advising Notes

- See advisor to ensure you are following the correct degree path
- Self placement into MTH 104 (MTH 65) or higher and WR 115 or higher are required for entry into the CIS program.