

# 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.

## 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
<b>First Year</b>		
<b>First Term</b>		
CIS 120	Intro to Digital Literacy	4
CIS 122	Orientation to Programming	4
CIS 140M	Intro to MS Operating Systems	4
MTH 095	Intermediate Algebra (or higher)	4
<b>Credits</b>		<b>16</b>
<b>Second Term</b>		
CIS 133CS	Intro to Programming I	4
CIS 240M	Install-Config Windows Server	4
PSY 101	Psychology of Human Relations	3
WR 121Z	Composition I <sup>1</sup>	4
<b>Credits</b>		<b>15</b>
<b>Third Term</b>		
CIS 151C	Introduction to Networks	4

CIS 233CS	Intro to Programming II	4
CIS 275	Intro to Database Mgmt Sys I	4
CIS 279M	MS Windows Server Admin I	4
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>First Term</b>		
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	MS Windows Server Admin II	4
<b>Credits</b>		<b>16</b>
<b>Second Term</b>		
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
<b>Credits</b>		<b>16</b>
<b>Third Term</b>		
CIS 145	Computer Forensics	4
CIS 280	CWE-CIS <sup>2</sup>	2
CIS 285C	Cloud Services Technologies	3
COM 111Z	Public Speaking	4
<b>Credits</b>		<b>13</b>
<b>Total Minimum Credits</b>		<b>92</b>

<sup>1</sup> A grade of C or better must be attained in the courses indicated.

<sup>2</sup> Student can take CIS 280 during the summer term as desired.

## Program Entrance Requirements

- Placement scores of MTH 65 or higher and WR 115 or higher are required for entry into the CIS program.