

# COMPUTER INFORMATION SYSTEMS

## Cybersecurity Associate of Applied Science

\*Pending approval from Higher Education Coordinating Commission (HECC)

### PROGRAM MISSION

The Cybersecurity program provides students with a quality education that motivates them to reach their full potential through up-to-date cybersecurity course content, relevant lab experiences, and real-world work experience.

### 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

#### Year One

CIS 120	Introduction to Digital Literacy	4
CIS 122	Orientation to Programming	4
CIS 133CS	Introduction to Programming I	4
CIS 140M or CIS 140L	Introduction to Microsoft Operating Systems Introduction to Linux Operating System	4 4
CIS 151C	Introduction to Networks	4
CIS 233CS	Introduction to Programming II	4
CIS 240M	Installing & Configuring Microsoft Windows Server	4
CIS 275	Introduction to Database Management Systems I	4
CIS 279M	Microsoft Windows Server Administration I	4
MTH 095	Intermediate Algebra (or higher)	4
PSY 101	Psychology of Human Relations	3
WR 121	Academic Composition*	4

**Year One Credits 47**

#### Year Two

CIS 145	Computer Forensics for Ethical Hackers	4
CIS 152C	Switching, Routing and Wireless Essentials	4
CIS 153C	Enterprise Networking, Security, and Automation	4
CIS 195	Authoring for the World Wide Web I	4
CIS 276	Introduction to Data Management Systems II	4
CIS 280	Cooperative Work Experience: CIS	2
CIS 284	Network Security Fundamentals	4
CIS 285A	Ethical Hacking	4
CIS 285C	Cloud Services Technologies	3
CIS 288M	Microsoft Windows Server Administration II	4
CIS 295	Authoring for the World Wide Web II	4
SP 111	Fundamentals of Public Speaking	4

**Year Two Credits 45**

\* A grade of C or better must be attained in the courses indicated.