COMPUTER NETWORKING AND SECURITY, ASSOCIATE IN SCIENCE

The Computer Networking and Security program prepares students for employment in the Information Technology (IT) sector, including positions in information security administration, Microsoft system administration, network administration, and technical support.

It also prepares students for the following industry certifications:

- Cisco CCNA v7
- CompTIA Security+
- CompTIA Cybersecurity Analyst (CYSA+)
- CompTIA Linux+
- Microsoft MD-100 - Windows Client
- Microsoft MD-101 - Managing Modern Desktops
- Microsoft AZ-800 - Administering Windows Server Hybrid Core Infrastructure
- Microsoft AZ-801 - Configuring Windows Server Hybrid Advanced Services

Learning Outcomes

Upon successful completion of the program, students will be able to:

- Implement and configure Cisco routers to perform local and wide area network routing using various routing protocols.
- Implement and configure Cisco switches to perform local area network switching.
- Implement and configure security on local and wide area networks.
- Implement and configure UNIX systems to obtain and provide network services.
- Configure and manage a Microsoft Windows Server and Client, both on premises and in the cloud.
- Install and configure settings in a Windows client operating system including configuring storage and security, managing data access, configuring applications, network connectivity, and recovery options.

Associate in Science Degree Major Requirements

Code	Title	Units
Certificate of Achievement Requirements		
CSIS 72A	Administering Windows Server Core Infrastructure	3
CSIS 72B	Configuring Windows Server Hybrid Advanced Services	3
CSIS 76A	Cisco Certified Network Associate (CCNA) 1	3
CSIS 76B	Cisco Certified Network Associate (CCNA) 2	3
CSIS 76C	Cisco Certified Network Associate (CCNA) 3	3
CSIS 80	Introduction to UNIX and Linux	3
CSIS 83A	Microsoft Client Operating System	3
CSIS 86	Network Security Fundamentals/Security+ Prep	3
CSIS 89	Preparation for Cybersecurity Analyst Certification (CYSA+)	3
Required Core		

Select one course from the following:		1-4
BUSI 2	Business Communication	
CSCI 9	Programming Fundamentals: Python	
CSIS 75	Introduction to Computer Hardware/A+ Prep	
CSIS 81	ITIL Essentials	
CSIS 87	Computer Forensics	
CSIS 88	Security Practices: Penetration Testing and Discovery	
CSIS 98	Project Development	
TOTAL MAJOR UNITS		**28-31**
Additional Requirements		**29-32**
Complete Competency Requirements, general education pattern (MPC General Education or Cal-GETC), and electives, if needed, for a total of 60 degree-applicable units.		
Total Units		**60**

Please refer to the program requirements section of the Catalog for information about associate degree requirements and certificate requirements including Information Competency, and General Education requirements.