

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 CCNA v7 certification through the Cisco Certified Network Academy, CompTIA Security+ certification, and the Microsoft Client Windows 10 and Windows Server certification.

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.
- Install and configure settings in a Windows 10 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 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 70	Business Communication	
CSIS 9	Programming Fundamentals: Python	
CSIS 51C	Database Processing	
CSIS 75	Introduction to Computer Hardware/A+ Prep	
CSIS 77	Web Design and Publishing	
CSIS 81	ITIL Essentials	
CSIS 87	Computer Forensics	
CSIS 88	Security Practices: Penetration Testing and Discovery	
CSIS 98	Project Development	

TOTAL MAJOR UNITS	25-28
Additional Requirements	
Complete Competency Requirements, general education pattern (MPC General Education, CSU General Education, or IGETC), and electives, if needed, for a total of 60 degree-applicable units.	32-35
Total Units	60

Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.

MPC "Ready to Work" Career Education programs offer students the opportunity to gain knowledge and skills needed for employment and job advancement.

All students should consult with a Counselor to discuss career pathways, for support with career exploration and planning, and to create a personalized education plan to help them meet their academic, career, and personal goals. Visit MPC's Counseling website for more information about Counseling services provided by MPC and to connect with a Counselor.

Additional resources are available through MPC's Career & Transfer Resource Center (CTRC). The CTRC offers career resources, workshops, guidance and referrals. Visit the CTRC for support finding online career information and other resources to explore majors, occupations, and employment information.