

# COMPUTER NETWORKING AND SECURITY, CERTIFICATE OF ACHIEVEMENT

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.

## Certificate of Achievement Requirements

Code	Title	Units
<b>Required Core</b>		
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
WORK 96	Professional and Essential Skills	1-4

or WORK 99 Career-Focused Work Experience

**Total Units** **28-31**

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.

The model sequence of coursework below is one pathway for students to complete the program. The information below is not an official educational plan. An MPC Counselor can assist you with creating a personalized education plan based on your academic, career, and personal goals. Visit MPC's Counseling website for more information about Counseling and up-to-date program requirements.

## Suggested Course Sequence

### Year 1

Fall		Units
CSIS 72A	Administering Windows Server Core Infrastructure	3
CSIS 76A	Cisco Certified Network Associate (CCNA) 1	3
CSIS 83A	Microsoft Client Operating System	3
CSIS 86	Network Security Fundamentals/Security+ Prep	3
WORK 96 or WORK 99	Professional and Essential Skills or Career-Focused Work Experience	1-4
<b>Units</b>		<b>13-16</b>

### Spring

CSIS 72B	Configuring Windows Server Hybrid Advanced Services	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 89	Preparation for Cybersecurity Analyst Certification (CYSA+)	3
<b>Units</b>		<b>15</b>
<b>Total Units</b>		<b>28-31</b>

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.