



Pre-Baccalaureate Certificate

Network Security Certificate

• CIP code 111003 • 27 credits, 3 terms

Program Description

The Network Security Certificate provides students with a solid foundational knowledge of network operating systems, network security, digital forensics, and incident response methods.

Learning Outcomes

Upon completion of the Network Security certificate, students will be able to:

- Analyze network and data traffic
- Build simple Local Area Networks (LAN)
- Establish disaster recovery strategies
- Implement and troubleshoot Access control list for Pv4 and IPv6 networks
- Explore network security tools
- Monitor networks for security breaches
- Install, configure and test security hardware and software tools with supporting documentation such as port scanners

Careers

Graduates of the Network Security Certificate program will be prepared for employment in a variety of industries including business, education, healthcare, government, insurance, manufacturing, and retail. Employment opportunities include but are not limited to Computer Network Defense Analyst, Computer Network Defense Infrastructure Support, Computer Network Support Specialist, Network Administrator, Penetration Tester, Red Team Technician, and Systems Administrator.

Courses can be taken online or on-site.

Courses 27 credits

Term 1 Spring

Introduction to Networking Basics

- CMP 250 Fundamentals of Cybersecurity
- CMP 280 Network Security and Communications
- CMP 205 Basic Network Troubleshooting

Term 2 Fall

Network Management

- CMP 260 EndPoint & Infrastructure Security
- CMP 400 Cloud Network Security
- CMP 401 Wireless Technology & Security

Term 3 Spring

Protecting & Network Monitoring

- CMP 415 Network & Digital Forensics Investigation
- CMP 435 Network Protection & Threat Monitoring
- CMP 450 Machine Learning for Network Intrusion Detection

All courses 3 credits except as noted.