



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

CMP250 Fundamentals of Cybersecurity

CMP280 Introduction to Computer and Network Security Essentials

CMP205 Basic Network Troubleshooting

Term 2 Fall

Network Management

CMP260 EndPoint & Infrastructure Security

CMP400 Cloud Network Security

CMP401 Wireless Technology & Security

Term 3 Spring

Protecting & Network Monitoring

CMP415 Network & Digital Forensics Investigation

CMP435 Network Protection & Threat Monitoring

CMP450 Machine Learning for Network Intrusion Detection

All courses 3 credits except as noted.