CO-N+
COMPTIA NETWORK+

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Foundation	Networking	Instructor-led	NA

INTRODUCTION

Network+ is the premier vendor-neutral IT infrastructure certification, validating the fundamental skills required for early-career networking job roles and preparing candidates to effectively manage and maintain modern network environments, including cloud, virtualization, and IoT.

Network+ aligns with global IT standards and best practices and proves early-career networking professionals have the hands-on and technical skills required to manage network connectivity in any environment, preparing them for the diverse challenges they can expect to face in their IT careers.

AUDIENCE PROFILE

This course is intended for IT professionals with a basic knowledge of computer hardware, software, and operating systems who wish to increase their knowledge and understanding of networking concepts and acquire the required skills to prepare for a career in network support or administration, or who wish to prepare for the CompTIA Network+ certification (Exam N10-009)

PREREQUISITES

Before attending this course, delegates must:

–   Hold the CompTIA A+ certification or;
–   Have at least 9 to 12 months of networking experience

COURSE OBJECTIVES

The CompTIA Network+ certification will certify that the successful candidate has the knowledge and skills required to:

–   Establish network connectivity by deploying wired and wireless devices.
–   Explain the purpose of documentation and maintain network documentation.
–   Configure common network services.
–   Explain basic data center, cloud, and virtual-networking concepts.
–   Monitor network activity and troubleshoot performance and availability issues.
–   Implement network security hardening techniques.
–   Manage, configure, and troubleshoot network infrastructure.

COURSE CONTENT

Lesson 1: Explaining Network Topologies
–   Networking Overview
–   OSI Model Concepts
–   SOHO Networks
–   Troubleshooting Methodology

Lesson 2: Supporting Cabling and Physical Installations
–   Ethernet
–   Copper Cables and Connectors
–   Wiring Implementation
–   Fiber Optic Cables and Connectors
–   Physical Installation Factors
–   Cable Troubleshooting

Lesson 3: Configuring Interfaces and Switches
–   Network Interfaces
–   Ethernet Switches
–   Switch Port Configuration
–   Switch Troubleshooting

Lesson 4: Configuring Network Addressing
–   Internet Protocol Basics
–   IP Version 4 Addressing
–   IP Version 4 Subnetting
–   Troubleshooting Tools
–   IP Version 6
–   IP Troubleshooting

Lesson 5: Configuring Routing and Advanced Switching
–   Routing Technologies
–   Dynamic Routing Technologies
–   Dynamic Routing Technologies
–   Network Address Translation
–   Firewalls
–   Enterprise Network Topologies
–   Virtual LANs
–   Routing and VLAN Troubleshooting

Module 6: Implementing Network Services
–   Transport and Application Layer Protocols

- Dynamic Host Configuration Protocol
- APIPA and SLAAC
- DHCP Relay and Troubleshooting
- Domain Name System
- DNS Troubleshooting

Module 7: Explaining Application Services
- Application Security and Time Synchronization
- Web, File, Print, and Database Services
- Email and Voice Services
- Disaster Recovery and High Availability

Lesson 8: Supporting Network Management
- Organizational Policies and Documentation
- Host Discovery and Monitoring
- Simple Network Management Protocol

- Event Management
- Packet Capture and Analysis
- Traffic Monitoring

Lesson 9: Explaining Network Security Concepts
- Security Concepts
- Network Threats and Attacks
- Spoofing Attacks
- Rogue System Attacks
- Social Engineering

Lesson 10: Applying Network Security Features
- Authentication
- Authorization and Account Management
- Network Hardening
- Switch Security
- Network Security Rules

Lesson 11: Supporting Network Security Design
- Zone-based Security
- Internet of Things
- Physical Security

Lesson 12: Configuring Wireless Networks
- Wireless Concepts and Standards
- Enterprise Wireless Network Design
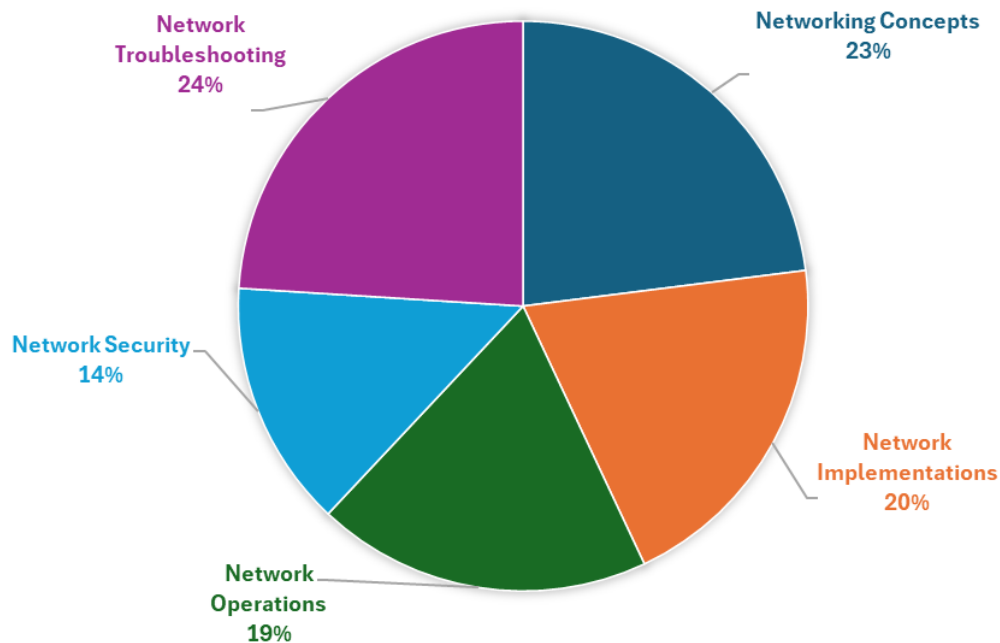- Wireless Security
- Wireless Troubleshooting

Lesson 13: Comparing Remote Access Methods
- WAN and Internet Connectivity
- Virtual Private Networks
- Remote Management

Lesson 14: Summarizing Cloud Concepts
- Datacenter and Storage Networks
- Cloud Concepts
- Cloud Networking
- Modern Network Environments

SKILLS AND COMPETENCIES COVERED

Network Troubleshooting 24%

Networking Concepts 23%

Network Security 14%

Network Implementations 20%

Network Operations 19%

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the CompTIA Network+ N10-009 Exam. Successfully passing this exam will result in the attainment of the CompTIA Network+ Certification.