CO-N+

COMPTIA NETWORK+

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

INTRODUCTION

The CompTIA Network+ is a vendor neutral networking certification that is trusted around the world. It validates the essential knowledge and skills needed to confidently troubleshoot, configure, or maintenance of a wired and wireless network. The Network+ performance-based course will help delegates pave their way onto a career in IT Infrastructure and Security. Attending the Network+ course will also assist delegates in preparation for the CompTIA Network+ examination.

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 N10-007)

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

In this course, delegates will describe the major networking technologies and systems of modern networks, and configure, manage, and troubleshoot modern networks. In addition, delegates will be able to:

– Identify basic network theory concepts and major network communications methods

– Describe bounded network media

– Describe unbounded network media

– Identify the major types of network implementations

– Identify TCP/IP addressing and data delivery methods

– Analyse routing and switching technologies

– Identify the components of a TCP/IP implementation

– Analyse network security

– Implement network security

– Identify the components of a WAN implementation.

– Identify the components used in cloud computing and virtualization

– Identify the components of a remote network implementation

– Manage networks

– Troubleshoot network issues

COURSE CONTENT

Lesson 1: Network Theory
- Network Types
- Network Standards and the OSI Model
- Data Transmission Methods

Lesson 2: Bounded Network Media
- Copper Media
- Fiber Optic Media
- Bounded Network Media Installation

Lesson 3: Unbounded Network Media
- Wireless Networking
- Wireless Network Devices and Components
- Implement Wireless Technology
- Internet of Things

Lesson 4: Network Implementations
Physical Network Topologies
- Logical Network Topologies
- Ethernet Networks
- Network Devices

Lesson 5: TCP/IP Addressing and Data Delivery
- The TCP/IP Protocol Suite

- IPv4 Addressing
- Default IP Addressing Schemes
- Create Custom IP Addressing schemes
- IPv6 Addressing

Module 6: Routing and Switching
- Switching
- Network Packet Routing
- Static and Dynamic IP Routing
- VLANs

Module 7: TCP/IP Implementation
- Configure IP Addresses
- Naming Services
- TCP/IP Utilities
- Common TCP/IP Protocols

Lesson 8: Network Security Analysis
- Introduction to Network Security
- Network Security Policies
- Physical Security
- Common Network Attacks

Lesson 9: Network Security Implementation
- Authentication
- Access Control
- Port, Service, and Protocol Security

- Wireless Network Security
- Patches and Updates
- Mitigation techniques

Lesson 10: WAN Infrastructure
- WAN Basics
- WAN Connectivity Methods
- WAN Transmission Technologies
- VoIP

Lesson 11: Cloud and Virtualization Techniques
- Virtualization Technologies
- Network Storage Technologies
- Cloud Computing

Lesson 12: Remote Networking
- Remote Network Architectures
- Remote Access Network Implementations
- Virtual Private Networking

Lesson 13: Network management
- Monitor Networks
- Document the Network
- Establish Baselines
- Optimize Network performance
- Ensure Business Continuity

SKILLS AND COMPETENCIES COVERED

- Network Troubleshooting & Tools >
- Networking Concepts >
- Infrastructure >
- Network Security >
- Network Operations >

22%
23%
18%
17%
20%
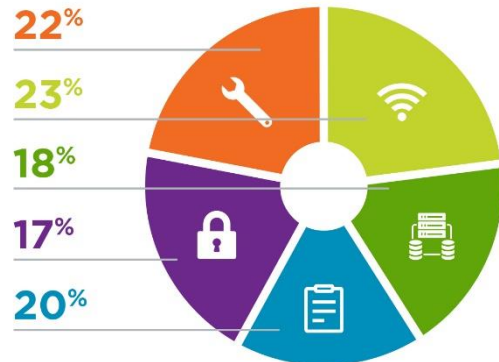
ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the CompTIA Network+ N10-007 Exam. Successfully passing this exam will result in the attainment of the CompTIA Network+ Certification.