

# CompTIA Network+ Certification (Exam N10-008)

# **Class Length**

5 Days

#### **Overview**

Each of the bulleted activities below is a separate study task within the CertMaster Learn learning plan. Students are encouraged to complete a certain number of tasks in each login session based on their desired course completion date. Review Activities are embedded within the eBook. Videos and Practice Questions are found in the CompTIA Learning Center, the platform through which the eBook is delivered. Labs are available at the course level or integrated as study tasks within CertMaster Learn.

# **Prerequisite Comments**

CompTIA A+ and/or a minimum of 9 months networking experience recommended.

# **Target Audience**

This course is suitable to students with roles as Network Field Technician/Engineer Network Administrator Help Desk Technician Network Support Specialist Network Analyst

# **Course Objectives**

At course completion, students will be knowledgeable in:
Comparing OSI Model Network Functions
Deploying Ethernet Cabling
Deploying Ethernet Switching
Troubleshooting Ethernet Networks
Explaining IPv4 Addressing
Supporting IPv4 and IPv6 Networks



Configuring and Troubleshooting Routers
Explaining Network Topologies and Types
Explaining Transport Layer Protocols
Explaining Network Services
Explaining Network Applications
Ensuring Network Availability
Explaining Common Security Concepts
Supporting and Troubleshooting Secure Networks
Deploying and Troubleshooting Wireless Networks
Comparing WAN Links and Remote Access Methods
Explaining Organizational and Physical Security Concepts
Explaining Disaster Recovery and High Availability Concepts
Applying Network Hardening Techniques
Summarizing Cloud and Datacenter Architecture

#### **Course Outline**

# 1 - Comparing OSI Model Network Functions

Topic 1A: Compare and Contrast OSI Model Layers

Topic 1B: Configure SOHO Networks

# 2 - Deploying Ethernet Cabling

Topic 2A: Summarize Ethernet Standards

Topic 2B: Summarize Copper Cabling Types

Topic 2C: Summarize Fiber Optic Cabling Types

# **3 - Deploying Ethernet Switching**

Topic 3A: Deploy Networking Devices

Topic 3B: Explain Network Interfaces

Topic 3C: Deploy Common Ethernet Switching Features

# 4 - Troubleshooting Ethernet Networks

Topic 4A: Explain Network Troubleshooting Methodology

Topic 4B: Troubleshoot Common Cable Connectivity Issues

# 5 - Explaining IPv4 Addressing

Topic 5A: D Explain IPv4 Addressing Schemes

Topic 5B: Explain IPv4 Forwarding

Topic 5C: Configure IP Networks and Subnets



# 6 - Supporting IPv4 and IPv6 Networks

Topic 6A: Use Appropriate Tools to Test IP Configuration

Topic 6B: Troubleshoot IP Networks

Topic 6C: Explain IPv6 Addressing Schemes

# 7 - Configuring and Troubleshooting Routers

Topic 7A: Compare and Contrast Routing Concepts

Topic 7B: Compare and Contrast Dynamic Routing Concepts

Topic 7C: Install and Troubleshoot Routers

#### 8 - Explaining Network Topologies and Types

Topic 8A: Explain Network Types and Characteristics

Topic 8B: Explain Tiered Switching Architecture

Topic 8C: Explain Virtual LANs

#### 9 - Explaining Transport Layer Protocols

Topic 9A: Compare and Contrast Transport Protocols

Topic 9B: Use Appropriate Tools to Scan Network Ports

# 10 - Explaining Network Services

Topic 10A: Explain the Use of Network Addressing Services

Topic 10B: Explain the Use of Name Resolution Services

**Topic 10C: Configure DNS Services** 

#### 11 - Explaining Network Applications

Topic 11A: Explain the Use of Web, File/Print, and Database Services

Topic 11B: Explain the Use of Email and Voice Services

#### 12 - Ensuring Network Availability

Topic 12A: Explain the Use of Network Management Services

Topic 12B: Use Event Management to Ensure Network Availability

Topic 12C: Use Performance Metrics to Ensure Network Availability

# 13 - Explaining Common Security Concepts

Topic 13A: Explain Common Security Concepts

Topic 13B: Explain Authentication Methods



#### 14 - Supporting and Troubleshooting Secure Networks

Topic 14A: Compare and Contrast Security Appliances Topic 14B: Troubleshoot Service and Security Issues

#### 15 - Deploying and Troubleshooting Wireless Networks

Topic 15A: Summarize Wireless Standards

Topic 15B: Install Wireless Networks

Topic 15C: Troubleshoot Wireless Networks

Topic 15D: Configure and Troubleshoot Wireless Security

#### 16 - Comparing WAN Links and Remote Access Methods

Topic 16A: Explain WAN Provider Links

Topic 16B: Compare and Contrast Remote Access Methods

#### 17 - Explaining Organizational and Physical Security Concepts

Topic 17A: Explain Organizational Documentation and Policies

Topic 17B: Explain Physical Security Methods

Topic 17C: Compare and Contrast Internet of Things Devices

# 18 - Explaining Disaster Recovery and High Availability Concepts

Topic 18A: Explain Disaster Recovery Concepts
Topic 18B: Explain High Availability Concepts

# 19 - Applying Network Hardening Techniques

Topic 19A: Applying Network Hardening Techniques Topic 19B: Apply Network Hardening Techniques

# 20 - Summarizing Cloud and Datacenter Architecture

Topic 20A: Summarize Cloud Concepts

Topic 20B: Explain Virtualization and Storage Area Network Technologies

Topic 20C: Explain Datacenter Network Architecture