

## Network+ Course Outline

### 1 - Explaining the OSI and TCP/IP Models

- Topic A: Explain OSI Model Layers
- Topic B: Explain the TCP/IP Suite

### 2 - Explaining Properties of Network Traffic

- Topic A: Explain Media Types and Access Methods
- Topic B: Deploy Ethernet Standards
- Topic C: Configure and Monitor Network Interfaces

### 3 - Installing and Configuring Switched Networks

- Topic A: Install and Configure Hubs and Bridges
- Topic B: Install and Configure Switches
- Topic C: Compare and Contrast Network Topologies
- Topic D: Compare and Contrast Network Types

### 4 - Configuring IP Networks

- Topic A: Configure IPv4 Addressing Components
- Topic B: Test IP Interfaces with Command Line Tools
- Topic C: Configure IPv4 Subnets
- Topic D: Configure Private and Public IPv4 Addressing Schemes
- Topic E: Configure IPv6 Addressing Components
- Topic F: Configure DHCP Services

### 5 - Installing and Configuring Routed Networks

- Topic A: Explain Characteristics of Routing
- Topic B: Install and Configure Routers

### 6 - Configuring and Monitoring Ports and Protocols

- Topic A: Explain the Uses of Ports and Protocols
- Topic B: Use Port Scanners and Protocol Analyzers
- Topic C: Explain the Use of Name Resolution Services
- Topic D: Configure DNS and IPAM Services

### 7 - Explaining Network Application and Storage Services

- Topic A: Explain the Uses of Network Applications
- Topic B: Explain the Uses of Voice Services and Advanced Networking Devices
- Topic C: Explain the Uses of Virtualization and Network Storage Services
- Topic D: Summarize the Concepts of Cloud Services

### 8 - Monitoring and Troubleshooting Networks

- Topic A: Monitor Network Interfaces and Logs
- Topic B: Explain Network Troubleshooting Methodology
- Topic C: Troubleshoot Common Network Services Issues

### 9 - Explaining Networking Attacks and Mitigations

- Topic A: Summarize Common Networking Attacks
- Topic B: Explain the Characteristics of VLANs
- Topic C: Explain the Characteristics of NAT and Port Forwarding

## **10 - Installing and Configuring Security Devices**

- Topic A: Install and Configure Firewalls and Proxies
- Topic B: Explain the Uses of IDS/IPS and UTM

## **11 - Explaining Authentication and Access Controls**

- Topic A: Explain Authentication Controls and Attacks
- Topic B: Explain the Uses of Authentication Protocols and Directory Services
- Topic C: Explain the Uses of Port Security and NAC
- Topic D: Implement Network Device Hardening
- Topic E: Explain Patch Management and Vulnerability Scanning Processes

## **12 - Deploying and Troubleshooting Cabling Solutions**

- Topic A: Deploy Structured Cabling Systems
- Topic B: Deploy Twisted Pair Cabling Solutions
- Topic C: Test and Troubleshoot Twisted Pair Cabling Solutions
- Topic D: Deploy Fiber Optic Cabling Solutions

## **13 - Implementing and Troubleshooting Wireless Technologies**

- Topic A: Install and Configure Wireless Technologies
- Topic B: Troubleshoot Wireless Performance Issues
- Topic C: Secure and Troubleshoot Wireless Connectivity

## **14 - Comparing and Contrasting WAN Technologies**

- Topic A: Compare and Contrast WAN Core Service Types
- Topic B: Compare and Contrast WAN Subscriber Service Types
- Topic C: Compare and Contrast WAN Framing Service Types
- Topic D: Compare and Contrast Wireless and IoT WAN Technologies

## **15 - Using Remote Access Methods**

- Topic A: Use Remote Access VPNs
- Topic B: Use Remote Access Management Methods

## **16 - Identifying Site Policies and Best Practices**

- Topic A: Manage Networks with Documentation and Diagrams
- Topic B: Summarize the Purposes of Physical Security Devices
- Topic C: Compare and Contrast Business Continuity and Disaster Recovery Concepts
- Topic D: Identify Policies and Best Practices