

Network+ Certification

4 Sessions –

12 Hours of Interactive On Line Training

The CompTIA Network+® Certification course from Network+ is for anyone beginning an IT career or looking to enhance their career opportunities. Expert instructor, Mike Meyers, takes you step-by-step through exam topics including interconnecting operating systems, network implementation and network support. Meyers demonstrates the latest technologies and explores wireless networking, gigabit Ethernet and disaster recovery. At the conclusion of this course, you'll understand the skills needed to install, configure and troubleshoot basic networking hardware and be prepared to pass the CompTIA Network+® certification exam.

Prerequisites: CompTIA recommends candidates have at least nine months experience in network support or administration. A+ certification or equivalent experience helpful.

Benefits

- ExamForce courses meet or exceed all the latest CompTIA® certification objectives.
- Gain valuable skills and increase your earning potential.
- Acquire knowledge that will put you on the path to other certifications.
- Increase your credibility and marketability in the IT industry.

Session 1

Section A: Introduction

- Network+ Certification
- Network+ Domains
- Exam Details
- What is a Network?
- The Goal of Networking
- Client/Server vs. Peer-to-Peer

Section B: Topologies

- Topology Overview
- Bus Topology
- Ring Topology
- Star Topology
- Mesh Topology
- Hybrid Topology
- Star Ring Topology

Section C: Physical OSI Layers

- OSI Model Concept
- The Physical Layer
- The MAC Address
- Winipcfg/Ipconfig
- Frames
- Frame Layout
- Processing Frames
- Network Protocols

Section D: Logical OSI Layers

- Assembly/Disassembly
- Sessions
- VPNs
- 7-Layer Model

Section E: Cabling & Connectors

- Coaxial
- Fiber Optics
- Twisted Pair
- FireWire

Section F: Ethernet Basics

Session 2

Section A: Structured Cabling

- Terms
- EIA/TIA Cabling Standards
- Fire Ratings
- Cabling & Crimping
- Equipment Racks/Patch Panels
- Connecting the workspace
- Wall Jack

Section B: Testing Tools

- Patch Cables
- Link Lights
- Continuity Tester
- TDRs
- Tone Generators
- Cable Certification

Section C: Protocol Concepts

- Network Operating Systems
- Protocol Terminology
- Understanding Protocols
- Name Resolution
- Transport Layer
- Network Layer
- Multiple Protocols

Section D: Common Protocols

- NetBIOS/NetBEUI
- Installing NetBIOS/NetBEUI
- IPX/SPX
- IPX/SPX Properties
- TCP/IP

Section E: Practical TCP/IP

- TCP/IP Properties
- IP Address to Binary
- Purpose of TCP/IP
- Subnet Mask
- ARP
- Default Gateway

Session 3

Section A: Network Protocols/DNS

- Transport/Session Protocols
- Port Numbers
- DNS
- Hierarchical Namespace
- DNS Tree

Section B: DNS within a Windows Environment

- Broadcast
- Host File
- DNS Server
- Domain Name Resolution
- DNS Properties
- Nslookup
- DNS Cache
- DHCP Resolution
- DHCP Client Side
- APIPA

Section C: Network OS Concepts

- Network Types
- Security Model
- Resource-Based Model
- Server-Based Model
- Directory-Based Model

Section D: History of Network Operating Systems

- Novell NetWare v3
- Windows Versions
- Windows NT
- NetWare 4/NDS
- Active Directory
- UNIX & Linux
- Apple Computers
- Administrator Accounts

Section E: Sharing Resources in Windows 2000/XP

- 802 Standards
- Ethernet Frames
- CSMA/CD
- Collision Detection
- Reflection
- 10Base5
- 10Base2

Section G: Modern Ethernet

- 10Base-T Topology
- Bridges
- Cat Levels
- Wiring Standards
- Hubs & Connectors
- 5-4-3 Rule
- Ethernet Fiber Optics

Section H: Beyond 10Base-T

- Ethernet Switches
- 100Base-T
- Half/Full Duplex
- Gigabit Ethernet
- 10 Gigabit Ethernet

- ARP Example

Section F: IP Address/Subnetting

- Network IDs/Hosts
- Internet Class Licenses
- Subnetting
- Using Windows Calculator

- Sharing Resources
- NTFS Security
- Using Groups
- Workgroup to Domain

Section F: Protecting the Network

- Routers & Firewalls
- Private IP Addresses
- NAT
- Router Configurations
- Port Blocking
- Intranet/Extranet
- Proxy Servers
- Configuring IE for Proxy
- Passwords
- Antivirus

Session 4

Section A: Interconnecting Operating Systems

- Novell NetWare
- Novell Clients
- Mac to NetWare
- Connecting to Microsoft
- Samba/Third Party Tools
- UNIX/Linux to Windows
- Connecting to Macintosh
- Terminal Emulators

Section B: Dial-Up Connections

- Hardware & Groups
- Connection Types
- Packet Switching
- POTS/PSTN
- Configuring a Modem
- ISDN

Section C: WAN Connections

- Broadband/DSL Connections
- Cable/Satellite Connections
- Hardware Examples
- WAN Devices
- T1 DS1 & CSU/DSU
- TDM & T3/DS3
- Routers
- Fiber Optics
- Packet Switching
- X.25 & ATM

Section D: Remote Connection Options

- Frame Relay
- XP Connection Wizard
- VPN
- VLAN
- Authentication Protocols
- Encryption
- ICS

Section E: Wireless Networking

- Broadcasting Methods
- 802.11 Wireless Devices
- 802.11 Standards
- Configuring a Wireless Access Point
- Wireless Security
- Connecting to a Network
- Signal Boosters

Section F: Disaster Recovery

- Fault Tolerance

- RAID
- NAS
- SAN
- Backup/Recovery
- Hot & Cold Spares/Sites

Section G: Troubleshooting Strategy

- CompTIA Repair Approach
- Mike's Model Repair Approach

Section H: Alternate Wireless

- HomeRF
- Bluetooth
- Bluetooth Devices

Section I: IPv6

- IPv6 Address
- Link Local
- Site Local
- Aggregatable Global