

## Network+ Certification

Days of Training: 5

### Overview

In this course students learn skills that help prepare for the CompTIA Network+ certification, 2005 objectives (exam N10-003). The course describes the major networking technologies, systems, skills, and tools used in modern PC-based computer networks.

### Prerequisites

Windows 98 - Level 1  
Windows 2000 - Level 1  
A+ Certification

### Lesson 1: Network Theory

- Networking Terminology
- Network Building Blocks
- Standard Network Models
- Network Topologies
- Network Categories

### Lesson 2: Network Communications Methods

- Transmission Methods
- Media Access Methods
- Signaling Methods

### Lesson 3: Network Data Delivery

- Data Addressing and Delivery
- Network Connection Mechanisms
- Reliable Delivery Techniques

### Lesson 4: Network Media and Hardware

- Bounded Network Media
- Unbounded Network Media
- Noise Control
- Network Connectivity Devices

### Lesson 5: Network Implementations

- The OSI Model
- Client Network Resource Access
- Ethernet Networks
- Token Ring Networks
- Fiber Distributed Data Interface (FDDI) Networks
- Wireless Technologies and Standards

### Lesson 6: Networking with TCP/IP

- Families of Protocols
- The TCP/IP Protocol
- Default IP Addresses
- Custom IP Addresses
- The TCP/IP Protocol Suite

### Lesson 7: TCP/IP Services

- IP Address Assignment Methods
- Host Name Resolution
- NetBIOS Name Resolution
- TCP/IP Utilities
- TCP/IP Upper-Layer Services
- TCP/IP Interoperability Services

### Lesson 8: Other Network Protocols

- The NetBEUI Protocol
- The IPX/SPX Protocol
- The AppleTalk Protocol
- The IP Version 6 (IPv6) Protocol

### Lesson 9: Local Area Network (LAN) Infrastructure

- Bridges and Switches
- IP Routing Topology
- Static IP Routing
- Dynamic IP Routing
- Controlling Data Movement with Filters and VLANs

### Lesson 10: Wide Area Network (WAN) Infrastructure

- WAN Switching Technologies
- WAN Transmission Technologies
- WAN Connectivity Methods
- Voice Over Data Systems

### Lesson 11: Network Security

- Network Threats
- Virus Protection
- Local Security
- Network Authentication Methods
- Data Encryption
- Internet Security

### Lesson 12: Remote Networking

- Remote Network Architectures
- Terminal Services Implementations
- Remote Access Networking Implementations
- Virtual Private Networking

### Lesson 13: Disaster Recovery

- Planning for Disaster Recovery
- Data Backup
- Fault Tolerance Methods

## Network+ Certification (Continued)

Days of Training: 5

### Overview

In this course students learn skills that help prepare for the CompTIA Network+ certification, 2005 objectives (exam N10-003). The course describes the major networking technologies, systems, skills, and tools used in modern PC-based computer networks.

### Prerequisites

Windows 98 - Level 1  
Windows 2000 - Level 1  
A+ Certification

### Lesson 14: Network Data Storage

Enterprise Data Storage Techniques  
Clustering  
Network-Attached Storage (NAS)  
Storage Area Network (SAN)  
Implementations

### Lesson 15: Network Operating Systems

Microsoft Operating Systems  
Novell NetWare  
UNIX and Linux Operating Systems  
Macintosh Networking

### Lesson 16: Network Troubleshooting

Troubleshooting Models  
TCP/IP Troubleshooting Utilities  
Hardware Troubleshooting Tools  
System Monitoring Tools  
Network Baselineing