



551 W. Dimond Blvd  
Anchorage, AK 99515  
(907) 267-4216

## NETWORK+ CERTIFICATION

**Course Description:** 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.

### Course Content

#### 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

**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