

## **CompTIA Network+ Training**

### **Course Outline**

This training course explores the following areas:

#### **Introduction**

- Definition of a Network
- LANs, WANs, and the Internet
- Functions of a Network
- Overview of Network Components
- Networking Models
- Definitions

#### **Cards and Cabling:**

- Network Adapter Cards
- Configuring and Installing a Network Card
- Diagnosing Network Card Failure
- Network Cabling
- Twisted Pair Cable
- Other Cable Types
- LAN Topologies
- Installing Cabling
- Crimping Cables
- Testing Cables
- Building a BUS Network and Testing Network Communications

#### **Network Technologies:**

- Introduction to the OSI Model
- Brief Outline of the Seven Layers - Name and Function
- Network Card Drivers
- Installing and Configuring Network Card Drivers
- Bindings
- 802 Standards
- Ethernet
- Token Ring
- Other Technologies

#### **Protocols:**

- Protocols
- TCP/IP
- IPX/SPX
- NetBEUI
- Characteristics of Network Protocols
- Choosing a Protocol
- Adding and Removing Protocols
- Protocol Configuration Problems

### **Extending Networks:**

- Repeaters and Hubs
- Bridges
- Routers and Bridge Routers
- Network Addresses
- Routing Tables

### **TCP/IP:**

- The Development of TCP/IP
- The TCP/IP Protocol
- TCP/IP as an Open Standard
- IP Addresses
- Configuring and Testing IP Addresses
- PING, WINIPCFG, and IPCONFG
- Viewing the ARP Cache
- Network Addresses
- Creating Subnets
- Modifying the Subnet Mask
- Default Gateway

### **Client/Server Communication Layers:**

- Server Operating Systems
- Comparison of Microsoft Windows NT, Novell Netware, and Unix
- Workstation Clients
- Microsoft Windows 9x, Microsoft Windows NT, and Novell Clients
- Mapping Network Drives

### **Remote Connectivity:**

- Requirements for Remote Connectivity
- Public Networks
- Dial Up Lines
- ISDN

### **Network Security:**

- User Level Security
- Share Level Security
- Adding Users
- Password Principles
- Encryption
- Firewalls