

## CompTIA Network+ Certification (2005 Objectives)

5 days

### Description

This ILT Series course is aimed at network system administrators who are preparing for the current CompTIA Network+ exam. Based on Windows Server 2003, this course covers the full range of skills and concepts students need to learn, such as basic networking concepts and configurations, the OSI model, working with network-related hardware, network configuration with TCP/IP, network operating system basics, fault tolerance and backup issues, and troubleshooting hardware and software problems.

### Prerequisites

- *CompTIA A+ Certification: Essentials*

### Course Outline

#### **Unit 1: Basic networking concepts**

Topic A: Networking fundamentals  
Topic B: Types of servers  
Topic C: Topologies  
Topic D: Planning in network design

#### **Unit 2: The OSI Model**

Topic A: Introduction to the OSI model

#### **Unit 3: Network adapters**

Topic A: Network adapter configuration  
Topic B: Troubleshooting network adapter problems

#### **Unit 4: Introducing protocols**

Topic A: Introduction to protocols  
Topic B: Channel access methods  
Topic C: Transport protocols  
Topic D: Remote access protocols  
Topic E: Security protocols

#### **Unit 5: Network cabling and devices**

Topic A: Network communication methods  
Topic B: Cables and connectors  
Topic C: Coaxial and fiber optic cables  
Topic D: Ethernet and Token Ring devices

#### **Unit 6: Internetworking components**

Topic A: Introduction to internetworking  
Topic B: Introducing bridges, routers and switches

#### **Unit 7: Remote and WAN connectivity**

Topic A: Introduction to remote connectivity  
Topic B: Installing and configuring a modem  
Topic C: Remote Access Service (RAS) and remote access clients  
Topic D: WAN connectivity

#### **Unit 8: Troubleshooting hardware components**

Topic A: Introduction to troubleshooting  
Topic B: Introduction to common network tools  
Topic C: The science of troubleshooting

#### **Unit 9: TCP/IP fundamentals**

Topic A: Evolution of TCP/IP  
Topic B: TCP/IP fundamentals

#### **Unit 10: TCP/IP addressing and subnetting**

Topic A: IP addressing  
Topic B: Subnetting and special addressing  
Topic C: TCP/IP installation and configuration

#### **Unit 11: Name resolution**

Topic A: The HOSTS file and Domain Name System  
Topic B: NetBIOS name resolution

#### **Unit 12: Firewalls and proxies**

Topic A: Firewalls  
Topic B: Proxy servers

**Unit 13: Troubleshooting network connectivity**

Topic A: TCP/IP troubleshooting tools  
Topic B: Telnet  
Topic C: File Transfer Protocol  
Topic D: Troubleshooting examples

**Unit 14: Identifying network operating system features**

Topic A: Microsoft Windows  
Topic B: Novell NetWare  
Topic C: UNIX, Linux, and Mac OS X Server  
Topic D: AppleShare IP

**Unit 15: Network clients**

Topic A: Network client review

**Unit 16: Directory services**

Topic A: Windows networking concepts  
Topic B: Directory services planning and implementation  
Topic C: Introduction to Active Directory  
Topic D: New Active Directory features in Windows Server 2003  
Topic E: Windows NT domains  
Topic F: Novell Directory Services/eDirectory

**Unit 17: Accessing and managing resources in a Windows network**

Topic A: Creating and managing Active Directory user accounts  
Topic B: Introduction to group accounts  
Topic C: The NTFS file system and permissions  
Topic D: Working with shared folders  
Topic E: Introduction to printing concepts

**Unit 18: Monitoring and troubleshooting a Windows server**

Topic A: Introduction to server monitoring  
Topic B: Troubleshooting with Event Viewer  
Topic C: Working with the Performance console

**Unit 19: Managing and troubleshooting resources in a NetWare network**

Topic A: User and group management  
Topic B: Rights and trustee assignments  
Topic C: User account restrictions  
Topic D: NDS/eDirectory context  
Topic E: NetWare log files  
Topic F: Using monitoring and management tools

**Unit 20: Fault tolerance and disaster recovery**

Topic A: System fault tolerance  
Topic B: Replication  
Topic C: Backup and UPS

**Unit 21: Routine maintenance**

Topic A: Keeping NOS software up to date  
Topic B: Virus protection

**Unit 22: Troubleshooting**

Topic A: Assessing and responding to problems  
Topic B: Troubleshooting procedures  
Topic C: Troubleshooting scenarios

**Appendix A: Installing NetWare 6.5**

Topic A: Basic NetWare server installation

**Appendix B: Installing Windows 2000 Server**

Topic A: Installing Windows 2000 Server