

CompTIA Network+

COURSE OVERVIEW

CompTIA Network+ is a vendor neutral networking certification that is trusted around the world. It validates the essential knowledge and skills needed to confidently design, configure, manage and troubleshoot any wired and wireless networks. CompTIA Network+ certified individuals are in-demand worldwide. With a CompTIA Network+ certification, you will possess the key skills to troubleshoot, configure and manage these systems and keep your company productive.

According to the U.S. Bureau of Labor Statistics, 12% job growth is expected in network and computer systems over the next seven years. Additionally, CompTIA Network+ professionals are known to excel in their job: 53% of IT and business executives agree that certified staff performs at a higher level than non-certified staff; this according to the CompTIA International Technology Adoption and Workforce Trends report. Global Knowledge's IT Skills and Salary Report estimates the average salary of a Network+ certified IT professional at about \$74,000.

This course will build on your existing user-level knowledge and experience with personal computer operating systems and networks to present fundamental skills and concepts that you will use on the job in any type of networking career.

WHO WILL BENEFIT FROM THIS COURSE?

If you are pursuing a CompTIA technical certification path, the CompTIA A+ certification is an excellent first step to take before preparing for the CompTIA Network+ certification.

PREREQUISITES

CompTIA A+ Certification or equivalent knowledge and some practical industry experience in networking are strongly recommended.

COURSE OBJECTIVES

Upon successful completion of this course, students will be able to:

- Identify the basic components of network theory.
- Identify the major network communications methods.
- Identify network data delivery methods.
- List and describe network media and hardware components.
- Identify the major types of network implementations.
- Identify the components of a TCP/IP network implementation.
- Identify the major services deployed on TCP/IP networks.
- Identify the components of a LAN implementation.
- Identify the components of a WAN implementation.
- Identify major issues and technologies in network security.
- Identify the components of a remote network implementation.
- Identify major issues and technologies in disaster recovery.
- Identify major data storage technologies and implementations.



- Identify the primary network operating systems.
- Explore tools, methods, and techniques used in managing a network.
- Describe how to troubleshoot network issues.

COURSE OUTLINE

Lesson 1: Network Theory

- Networking Terminology
- Network Building Blocks
- Standard Network Models
- Physical Network Topologies
- Logical 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
- Delivery Techniques

Lesson 4: Network Media and Hardware

- Bounded Network Media
- Unbounded Network Media
- Noise Control
- Network Connectivity Devices
- Wiring Distribution Components

Lesson 5: Network Implementations

- The OSI Model
- 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
- IP Address Basics
- Custom IP Addresses
- The IP Version 6 Protocol
- The TCP/IP Protocol Suite

Lesson 7: TCP/IP Services

- IP Address Assignment Methods
- Host Name Resolution
- TCP/IP Utilities



- TCP/IP Upper-Layer Services
- TCP/IP Interoperability Services

Lesson 8: Local Area Network Infrastructure

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

Lesson 9: WAN Infrastructure

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

Lesson 10: Network Security

- Computer Security Basics
- Authentication
- Data Encryption
- Protect Network Traffic with IP Security (IPsec)
- Internet Security
- Local Security
- Common Threats
- Threat Mitigation Techniques
- Intrusion Detection and Prevention
- Educate Users

Lesson 11: Remote Networking

- Remote Network Architectures
- Remote Access Networking Implementations
- Virtual Private Networking
- Remote Control Computing

Lesson 12: Disaster Recovery

- Examine Configuration Management Documentation
- Plan for Disaster Recovery
- Fault Tolerance Methods
- Data Backup

Lesson 13: Network Data Storage

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

Lesson 14: Network Operating Systems

- UNIX and Linux Operating Systems
- Apple Mac OS X



- Microsoft Operating Systems
- Novell Open Enterprise Server

Lesson 15: Network Management

- Monitoring Tools
- Network Baselineing
- Network Optimization

Lesson 16: Network Troubleshooting

- Troubleshooting Models
- TCP/IP Troubleshooting Utilities
- Hardware Troubleshooting Tools
- Common Connectivity Issues

WHY TRAIN WITH SUNSET LEARNING INSTITUTE?

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their technology Investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes live with the instructor, at any of our established training facilities, or from the convenience of your home or office
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- You will work with a dedicated account manager to suggest the optimal learning path for you and/or your team
- An enthusiastic student services team is available to answer any questions and ensure a quality training experience

Interested in Private Group Training?

[Contact Us](#)