

# CompTIA Network+ Training Course

CompTIA Network+ is a certification that confirms essential networking skills and knowledge required to design, configure, manage, and troubleshoot wired and wireless networks.

 NET-100

## Course Outcomes

## Professional, practical, & hands-on live instructor-led training

Start as a beginner and graduate as a certified professional, with the skills, experience, and job-search know how to get your career started.

 Start Today

## Potential Career Tracks

Network Administrator

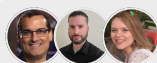
Network Technician

Network Support Specialist

IT Consultant

Systems Analyst

Help Desk Technician



Taught by Industry Veterans &  
World Class Instructors

## Introduction to CompTIA Network+

### Course Overview

The CompTIA Network+ Training Course at Intellectual Point is meticulously designed to equip learners with the fundamental and advanced networking knowledge necessary for today's IT industry. This course prepares you for the CompTIA Network+ certification exam, emphasizing practical networking concepts and tasks required by IT networks. You will gain the essential skills required to design and implement functional networks, identify the benefits and drawbacks of existing network configurations, troubleshoot network issues, and ensure network security, standards, and protocols. With a hands-on approach, this course balances theoretical understanding with real-world applications.

Throughout the training, you will explore network architecture, protocols, and topology concepts, alongside gaining proficiency in network troubleshooting and management. The course is enriched with interactive labs and exercises to practice establishing network connectivity through various methods. By its completion, you'll be equipped not only to tackle the certification exam but to proficiently apply acquired abilities in the field.

### Obtainable Skills

Network Configuration

Network Troubleshooting

Network Security Implementation

Protocols and Standards Management

Cabling and Connectors Understanding

Network Architecture Design

Performance Monitoring

Network Devices Installation

## Course Insights

### Audience Profile

This CompTIA Network+ course is tailored for entry-level to intermediate IT professionals keen on building a career in network administration. It is perfect for individuals already working in IT who are looking to enhance their networking capabilities, as well as newcomers aiming to break into the field with a strong foundational knowledge. The course is ideal for those who possess a basic understanding of computer networks and wish to formalize their skills and improve their job prospects across diverse sectors. Also, IT professionals interested in pursuing network management as a specialization will find this course exceptionally beneficial for career advancement.

### Course Outcomes

By the end of this course, participants will:

1 Develop and deploy effective network solutions across various business environments.

2 Analyze and troubleshoot networks to resolve connectivity and performance-related issues.

3 Implement network security measures to safeguard against threats and vulnerabilities.

4 Identify and optimize network components and configurations to enhance efficiency.

5 Achieve certification readiness for CompTIA Network+, validating networking expertise.

# Module by Module Learning *Outline*

 6 Modules

## Module 1: Networking Fundamentals

### Learning Objectives:

- Understand basic networking concepts and terminologies.
- Recognize various network topologies and architectures.

### Topics Covered

#### Network Concepts:

- Definition and importance of networks.
- Types of networks: LAN, WAN, MAN, and PAN.

#### Network Topologies and Architectures:

- Star, bus, mesh, and hybrid topologies.
- Client-server vs. peer-to-peer networking models.

## Module 2: Network Infrastructure and Devices

### Learning Objectives:

- Identify and understand the functions of various network devices.
- Comprehend the OSI and TCP/IP models and their significance.

### Topics Covered

#### Network Devices:

- Routers, switches, hubs, and access points.
- Firewalls and their roles in network security.

#### OSI and TCP/IP Models:

- Layers of the OSI model and their functionalities.
- Comparison between OSI and TCP/IP models.

## Module 3: IP Addressing and Subnetting

### Learning Objectives:

- Master IP addressing schemes and subnetting for efficient network management.
- Implement IPv4 and IPv6 addressing in network configurations.

### Topics Covered

#### IP Addressing:

- Differences between IPv4 and IPv6.
- Introduction to IP subnetting concepts.

#### Subnetting Techniques:

- Calculating subnets and host ranges.
- Implementing VLSM (Variable Length Subnet Mask).

## Module 4: Network Security and Protocols

### Learning Objectives:

- Implement network security measures to protect data integrity.
- Understand and apply various networking protocols.

### Topics Covered

#### Network Security:

- Common network security threats and countermeasures.
- Introduction to VPNs and encryption techniques.

#### Networking Protocols:

- Overview of TCP, UDP, and IP protocols.
- Understanding HTTP, HTTPS, FTP, and SMTP.

## Module 5: Troubleshooting and Network Management

### Learning Objectives:

- Develop proficiency in troubleshooting network issues.
- Learn about network management and monitoring tools.

### Topics Covered

#### Network Troubleshooting:

- Common network issues and troubleshooting steps.
- Utilizing network troubleshooting tools: ping, traceroute, etc.

#### Network Management:

- Introduction to SNMP (Simple Network Management Protocol).
- Performance monitoring and optimization techniques.

## Module 6: Hands-On Lab and Exam Preparation

### Learning Objectives:

- Apply theoretical concepts through hands-on exercises.
- Prepare effectively for the CompTIA Network+ certification exam.

### Topics Covered

#### Practical Network Labs:

- Configuring network devices and establishing connectivity.
- Simulating and resolving network issues in lab environments.

#### Exam Preparation Strategies:

- Review of key concepts and exam tips.
- Practice exams and assessment of readiness.