

# CompTIA Network+

## Introduction

CompTIA Network+ is curated for professionals who desire to have the essential knowledge and skills in networking to develop an outstanding career in IT infrastructure or administration in the long run. Moreover, this course is beneficial for entry-level IT professionals with a basic knowledge of computer hardware, software, and operating systems. This certification course will help those candidates in increasing their knowledge and understanding of networking concepts to an advanced level.

## Course Highlights

This course teaches you about core aspects such as;

- Manage and troubleshoot a basic network infrastructure
- Install, operate, and configure wired and wireless networks
- Common networking protocols and ports
- The wiring standards and use the latest network testing tools
- Troubleshooting performance and connectivity issues
- Networking technologies and basic network design principles
- Differentiating between common network devices

## Course Outline

### MODULE 1: Networking Concepts

- Explain the purposes and uses of ports and protocols.
- Explain devices, applications, protocols, and services at their appropriate OSI layers.
- Explain the concepts and characteristics of routing and switching.
- Given a scenario, configure the appropriate IP addressing components.
- Compare and contrast the characteristics of network topologies, types, and technologies.
- Given a scenario, implement the appropriate wireless technologies and configurations.
- Summarize cloud concepts and their purposes.
- Explain the functions of network services.

### MODULE 2: Infrastructure

- Given a scenario, deploy the appropriate cabling solution.
- Given a scenario, determine the appropriate placement of networking devices on a network and install/configure them.
- Explain the purposes and use cases for advanced networking devices.
- Explain the purposes of virtualization and network storage technologies.
- Compare and contrast WAN technologies.

### MODULE 3: Network Operations

- Given a scenario, use appropriate documentation and diagrams to manage the network.
- Compare and contrast business continuity and disaster recovery concepts.
- Explain common scanning, monitoring, and patching processes and summarize their expected outputs.
- Given a scenario, use remote access methods.
- Identify policies and best practices.

### MODULE 4: Network Security

- Summarize the purposes of physical security devices.
- Explain authentication and access controls.
- Given a scenario, secure a basic wireless network.

- Summarize common networking attacks.
- Given a scenario, implement network device hardening.
- Explain common mitigation techniques and their purposes.

#### **MODULE 5: Network Troubleshooting and Tools**

- Explain the network troubleshooting methodology.
- Given a scenario, use the appropriate tool.
- Given a scenario, troubleshoot commonly wired connectivity and performance issues.
- Given a scenario, troubleshoot common wireless connectivity and performance issues.
- Given a scenario, troubleshoot common network service issues.

### **Prerequisites**

There are formal prerequisites but CompTIA recommends that candidates should have CompTIA A+ Certification and at least 9 to 12 months of networking experience.

### **Target Audience**

This certification is intended for;

- Junior Network Administrator
- Computer Technician
- Network Field Technician
- Help Desk Technician
- Junior System Engineer
- System Engineer
- IS Consultant
- Network Support Specialist
- Network Field Engineer
- Network Analyst

### **Duration**

16 hours training course