

Duration	Delivery Methods
5 Daytime Classes or	Virtual, Private Group,
10 Evening Classes	
	5 Daytime Classes or

## **CAREER SKILLS+**<sup>™</sup>

CompTIA's Network+ certification is a foundation-level certification designed for IT professionals with around one year of experience, whose job role is focused on network administration.

The CompTIA Network+ exam will certify the successful candidate has the knowledge and skills required to troubleshoot, configure, and manage common network devices; establish basic network connectivity; understand and maintain network documentation; identify network limitations and weaknesses; and implement network security, standards, and protocols. The candidate will have a basic understanding of enterprise technologies, including cloud and virtualization technologies.

The Official CompTIA® Network+® (Exam N10-008): will teach you the fundamental principles of installing, configuring, and troubleshooting network technologies and

help you to progress a career in network administration. In this course, you will build on your existing user-level knowledge and experience with personal computer operating systems and networks to master the fundamental skills and concepts that you will need to use on the job in any type of networking career. Who Should Attend This course is intended for entry-level computer support professionals with a basic knowledge of computer hardware, software, and operating systems who wish to increase their knowledge and understanding of networking concepts and acquire the required skills to prepare for a career in network support or administration, or who wish to prepare for the CompTIA Network+ certification. CompTIA Network+ is the first certification IT professionals specializing in network administration and support should earn. Network+ is aimed at IT professionals with job roles such as network administrator, network technician, network installer, help desk technician, and IT cable installer. This course is also designed for students who are seeking the CompTIA Network+ certification and who want to prepare for the CompTIA Network+ N10-008 Certification Exam **Course Objectives** CompTIA A+ Certification (Exams 220-1001 and 220-1002) Agenda 1 - Explaining the OSI and TCP/IP Models Topic A: Explain OSI Model Layers Topic B: Explain the TCP/IP Suite 2 - Explaining Properties of Network Traffic Topic A: Explain Media Types and Access Methods Topic B: Deploy Ethernet Standards Topic C: Configure and Monitor Network Interfaces 3 - Installing and Configuring Switched Networks Topic A: Install and Configure Hubs and Bridges Topic B: Install and Configure Switches Topic C: Compare and Contrast Network Topologies Topic D: Compare and Contrast Network Types 4 - Configuring IP Networks Topic A: Configure IPv4 Addressing Components Topic B: Test IP Interfaces with Command Line Tools Topic C: Configure IPv4 Subnets



Topic D: Configure Private and Public IPv4 Addressing Schemes

Topic E: Configure IPv6 Addressing Components Topic F: Configure DHCP Services

**5 - Installing and Configuring Routed Networks** Topic A: Explain Characteristics of Routing

Topic B: Install and Configure Routers

**6 - Configuring and Monitoring Ports and Protocols** Topic A: Explain the Uses of Ports and Protocols

Topic B: Use Port Scanners and Protocol Analyzers

Topic C: Explain the Use of Name Resolution Services Topic D: Configure DNS and IPAM Services

7 - Explaining Network Application and Storage Services Topic A: Explain the Uses of Network Applications

Topic B: Explain the Uses of Voice Services and Advanced Networking Devices

Topic C: Explain the Uses of Virtualization and Network Storage Services

Topic D: Summarize the Concepts of Cloud Services 8 - Monitoring and Troubleshooting Networks

Topic A: Monitor Network Interfaces and Logs Topic B: Explain Network Troubleshooting Methodology

Topic C: Troubleshoot Common Network Services Issues

**9 - Explaining Networking Attacks and Mitigations** Topic A: Summarize Common Networking Attacks

Topic B: Explain the Characteristics of VLANs Topic C: Explain the Characteristics of NAT and Port Forwarding

**10 - Installing and Configuring Security Devices** Topic A: Install and Configure Firewalls and Proxies Topic B: Explain the Uses of IDS/IPS and UTM

**11 - Explaining Authentication and Access Controls** Topic A: Explain Authentication Controls and Attacks Topic B: Explain the Uses of Authentication Protocols and Directory Services

Topic C: Explain the Uses of Port Security and NAC Topic D: Implement Network Device Hardening

Topic E: Explain Patch Management and Vulnerability Scanning Processes

**12 - Deploying and Troubleshooting Cabling Solutions** Topic A: Deploy Structured Cabling Systems Topic B: Deploy Twisted Pair Cabling Solutions Topic C: Test and Troubleshoot Twisted Pair Cabling Solutions

Topic D: Deploy Fiber Optic Cabling Solutions



**13 - Implementing and Troubleshooting Wireless** Technologies

Topic A: Install and Configure Wireless Technologies Topic B: Troubleshoot Wireless Performance Issues Topic C: Secure and Troubleshoot Wireless Connectivity

**14 - Comparing and Contrasting WAN Technologies** Topic A: Compare and Contrast WAN Core Service Types Topic B: Compare and Contrast WAN Subscriber Service Types

Topic C: Compare and Contrast WAN Framing Service Types

Topic D: Compare and Contrast Wireless and IoT WAN Technologies

15 - Using Remote Access Methods

Topic A: Use Remote Access VPNs

Topic B: Use Remote Access Management Methods

**16 - Identifying Site Policies and Best Practices** Topic A: Manage Networks with Documentation and Diagrams

Topic B: Summarize the Purposes of Physical Security Devices

Topic C: Compare and Contrast Business Continuity and Disaster Recovery Concepts

Topic D: Identify Policies and Best Practices

