

CompTIA Network+

Course Outline

1. Networking Fundamentals

- Compare and contrast the Open Systems Interconnection (OSI) model layers and encapsulation concepts.
- Explain the characteristics of network topologies and network types.
- Summarize the types of cables and connectors and explain which the appropriate type for a solution is.
- Given a scenario, configure a subnet and use appropriate IP addressing schemes.
- Explain common ports and protocols, their application, and encrypted alternatives.
- Explain the use and purpose of network services.
- Explain basic corporate and datacenter network architecture.
- Summarize cloud concepts and connectivity options.

2. Network Implementations

- Compare and contrast various devices, their features, and their appropriate placement on the network.
- Compare and contrast routing technologies and bandwidth management concepts.
- Configure and deploy common Ethernet switching features.
- Install and configure the appropriate wireless standards and technologies.

3. Network Operations

- Use the appropriate statistics and sensors to ensure network availability.
- Explain the purpose of organizational documents and policies.
- Explain high availability and disaster recovery concepts and summarize which is the best solution.

4. Network Security

- Explain common security concepts.
- Compare and contrast common types of attacks.
- Apply network hardening techniques.
- Compare and contrast remote access methods and security implications.
- Explain the importance of physical security.

5. Network Troubleshooting

- Explain the network troubleshooting methodology.
- Troubleshoot common cable connectivity issues and select the appropriate tools.
- Use the appropriate network software tools and commands.
- Troubleshoot common wireless connectivity issues.
- Troubleshoot general networking issues.