

# CompTIA Network+ Certification



## Course Outline

### Domain 1. Network architecture

- Explain the functions and applications of various network devices
- Compare and contrast the use of networking services and applications
- Install and configure the following networking services/applications
- Explain the characteristics and benefits of various WAN technologies
- Install and properly terminate various cable types and connectors using appropriate tools
- Differentiate between common network topologies
- Differentiate between network infrastructure implementations
- Implement and configure the appropriate addressing schema
- Explain the basics of routing concepts and protocols
- Identify the basics elements of unified communication technologies
- Compare and contrast technologies that support cloud and virtualization
- Given a set of requirements, implement a basic network

### Domain 2. Network operations

- Use appropriate monitoring tools
- Analyze metrics and reports from monitoring and tracking performance tools
- Use appropriate resources to support configuration management
- Explain the importance of implementing network segmentation
- Install and apply patches and updates
- Configure a switch using proper features
- Install and configure wireless LAN infrastructure and implement the appropriate technologies in support of wireless capable devices

### Domain 3. Network security

- Compare and contrast risk related concepts
- Compare and contrast common network vulnerabilities and threats
- Implement network hardening techniques
- Compare and contrast physical security controls
- Install and configure a basic firewall
- Explain the purpose of various network access control models
- Summarize basic forensic concepts

### Domain 4. Troubleshooting

- Implement the following network troubleshooting methodology
- Analyze and interpret the output of troubleshooting tools

- Troubleshoot and resolve common wireless issues
- Troubleshoot and resolve common copper cable issues
- Troubleshoot and resolve common fiber cable issues
- Troubleshoot and resolve common network issues
- Troubleshoot and resolve common security issues
- Troubleshoot and resolve common WAN issues

## **Domain 5. Industry standards, practices, and network theory**

- Analyze a scenario and determine the corresponding OSI layer
- Explain the basics of network theory and concepts
- Deploy the appropriate wireless standard
- Deploy the appropriate wired connectivity standard
- Implement the appropriate policies or procedures
- Summarize safety practices
- Install and configure equipment in the appropriate location using best practices
- Explain the basics of change management procedures
- Compare and contrast the following ports and protocols
- Configure and apply the appropriate ports and protocols