

# uCertify

## Course Outline

**Pearson: CompTIA Network N10-006 Pearson**  
**uCertify**



18 Apr 2024

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary  
Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons

Syllabus

Chapter 1: CompTIA Network+ N10-006 Certification Guide

Chapter 2: Introduction

Chapter 3: Computer Network Fundamentals

Chapter 4: The OSI Reference Model

Chapter 5: Network Components

Chapter 6: Ethernet Technology

Chapter 7: IPv4 and IPv6 Addresses

Chapter 8: Routing IP Packets

Chapter 9: Wide-Area Networks

Chapter 10: Wireless LANs

Chapter 11: Network Optimization

Chapter 12: Command-Line Tools

Chapter 13: Network Management

Chapter 14: Network Security

Chapter 15: Network Troubleshooting

Chapter 16: Appendix: Exam Essentials

Videos and How To

9. Practice Test

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10. Performance Based labs

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11. Post-Assessment

## 1. Course Objective

Get certified for CompTIA Network+ with CompTIA Network+ Deluxe Study Guide Third Edition (Course & Labs). The labs are versatile and simulate real-world, hardware, software & command line interface environments and can be mapped to any text-book, course & training. The course and labs cover all the objectives of the N10-006 exam and include topics such as networks; open systems interconnection specifications; networking topologies connectors and wiring standards; and much more.

## 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

## 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.



## 4. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

**130**

**QUIZZES**

## 5. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

**298**

**FLASHCARDS**

## 6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.

**298**

**GLOSSARY OF  
TERMS**

## 7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform

2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

### Syllabus

Chapter 1: CompTIA Network+ N10-006 Certification Guide

Chapter 2: Introduction

Chapter 3: Computer Network Fundamentals



- Defining a Network
- Networks Defined by Geography
- Networks Defined by Topology
- Networks Defined by Resource Location
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 4: The OSI Reference Model

- The Purpose of Reference Models
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 5: Network Components

- Media
- Network Infrastructure Devices

- Specialized Network Devices
- Virtual Network Devices
- Voice over IP Protocols and Components
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 6: Ethernet Technology

- Principles of Ethernet
- Ethernet Switch Features
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 7: IPv4 and IPv6 Addresses

- Binary Numbering

- IPv4 Addressing
- Assigning IPv4 Addresses
- Subnetting
- IP Version 6
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 8: Routing IP Packets

- Basic Routing Processes
- Sources of Routing Information
- Routing Protocol Characteristics
- Routing Protocol Examples
- Address Translation
- Multicast Routing
- Real-World Case Study
- Summary

- Review All the Key Topics
- Performance-Based Exercises

## Chapter 9: Wide-Area Networks

- WAN Properties
- WAN Technologies
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 10: Wireless LANs

- Introducing Wireless LANs
- Deploying Wireless LANs
- Securing Wireless LANs
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 11: Network Optimization

- High Availability
- QoS Technologies
- Case Study: SOHO Network Design
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 12: Command-Line Tools

- Windows Commands
- UNIX Commands
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 13: Network Management

- Maintenance Tools
- Configuration Management
- Monitoring Resources and Reports
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 14: Network Security

- Security Fundamentals
- Categories of Network Attacks
- Defending Against Attacks
- Remote-Access Security
- Firewalls
- Virtual Private Networks
- Intrusion Detection and Prevention
- Real-World Case Study
- Summary

- Review All the Key Topics
- Performance-Based Exercises

## Chapter 15: Network Troubleshooting

- Troubleshooting Basics
- Physical Layer Troubleshooting
- Data Link Layer Troubleshooting
- Network Layer Troubleshooting
- Wireless Troubleshooting
- Specialized Networks
- Real-World Case Study
- Summary
- Review All the Key Topics
- Performance-Based Exercises

## Chapter 16: Appendix: Exam Essentials

### Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

**27**

VIDEOS

**08:16**

HOURS

## 12. Practice Test

**Here's what you get**

**118**

PRE-ASSESSMENTS  
QUESTIONS

**2**

FULL LENGTH TESTS

**120**

POST-ASSESSMENTS  
QUESTIONS

## Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.



## 13. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

### Lab Tasks

- Identifying functions of a network
- Identifying network components
- Identifying a network device
- Identifying network categories
- Identifying a network topology
- Identifying internetworking devices
- Identifying network topologies
- Identifying Clients and Servers
- Identifying OSI layer functions
- Identifying OSI layers
- Identifying connectionless communication
- Describing OSI layers
- Identifying TCP/IP protocol layers
- Identifying TCP/IP layers
- Identifying TCP utilities
- Identifying abbreviations for various Internet layer protocols

- Identifying RG standards
- Identifying types of cable
- Identifying fiber connectors
- Identifying various equipments
- Identifying components of a coaxial cable
- Terminating a cable with an RJ-45 plug
- Identifying devices used in an internetwork
- Identifying internetworking devices
- Identifying the network device
- Identifying network infrastructure devices
- Connecting systems to the Internet through a router
- Identifying types of hubs
- Installing and configuring a temporary server
- Identifying network devices
- Obtaining IP address information from a DHCP server
- Connecting a wireless router to the laptop
- Installing a NIC
- Connecting to a server using Remote Desktop Connection
- Identifying protocols and devices
- Identifying an RJ-45 connector
- Connecting a workstation to the Ethernet and to the Internet
- Connecting a computer system to the network
- Identifying Fast Ethernet standards
- Connecting Patch Cables between the Patch Panel and Switch Ports
- Identifying sequence of broadcast storm
- Converting a decimal number to binary and hex
- Connecting cable internet access for your network
- Obtaining IP DNS addresses
- Configuring IPv4 address
- Connecting a workstation to the LAN and configuring IPv4 properties
- Identifying Internet protocols and their subtypes
- Identifying steps for calculating subnets
- Configuring and testing IPv6 addresses
- Configuring Internet settings on a router
- Setting up a DMZ on a SOHO router

- Adding and deleting routes
- Identifying routing protocols
- Identifying WAN connection types
- Identifying WAN technology bandwidth
- Identifying WAN technology
- Identifying WAN bandwidth features
- Identifying speed of bandwidth technologies
- Creating a remote access VPN connection
- Identifying MPLS network elements
- Configuring SSID
- Identifying Ethernet standards
- Identifying WLANs
- Configuring Windows 7 wireless settings
- Identifying networking protocols
- Identifying quality issues
- Understanding the ipconfig command
- Analyzing network paths with tracert
- Analyzing network paths with pathping
- Analyzing the TCP/IP configuration with nbtstat
- Analyzing the TCP/IP configuration with netstat
- Analyzing domain names with nslookup
- Adding and removing an IPv6 address
- Understanding the arp command
- Understanding the netstat command in UNIX
- Identifying the components of a multimeter
- Identifying steps to use a Toner Probe
- Understanding configuration management
- Identifying Syslog severity levels
- Filtering entries in Event Viewer
- Identifying sequence of asymmetric encryption
- Identifying types of Denial of Service attacks
- Identifying network attacks
- Identifying Bluetooth devices attacks
- Identifying remote access methods
- Identifying a back-to-back firewall

- Configuring Windows firewall settings
- Identifying types of firewall
- Identifying firewall techniques
- Identifying VPN protocols
- Understanding IPsec VPN
- Identifying types of IDS
- Diagnosing a network problem
- Viewing TCP frame details using Network Monitor
- Identifying physical layer issues
- Troubleshooting physical link layer issues
- Troubleshooting data link layer issues
- Understanding data structures

## Here's what you get

**98**

PERFORMANCE BASED  
LAB

**33**

VIDEO TUTORIALS

**08:23**

HOURS

## 14. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

**GET IN TOUCH:**