

# uCertify

## Course Outline

### CompTIA Network Deluxe Study Guide



25 Mar 2024

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Videos and How To

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Here's what you get

Features

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## 1. Course Objective

Start your prep for CompTIA N10-006 exam with CompTIA Network+ Deluxe Study Guide. This course covers all the objectives of N10-006 exam and includes topics such as networks; open systems interconnection specifications; networking topologies connectors and wiring standards; and much more. The course is also 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.

## 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.

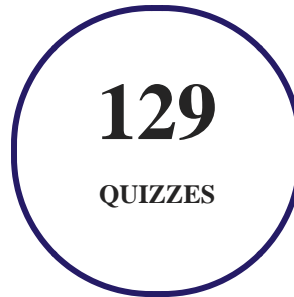
## 3. Exercises

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.

**406**  
EXERCISES

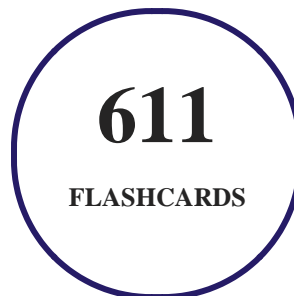
## 4. Quizzes

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.



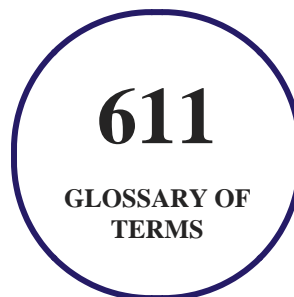
## 5. flashcards

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.



## 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.



## 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: Introduction to Networks

- First Things First: What's a Network?
- Physical Network Topologies
- Topology Selection, Backbones, and Segments



- Summary
- Exam Essentials
- Written Labs

## Chapter 2: The Open Systems Interconnection Specifications

- Internetworking Models
- The OSI Reference Model
- Introduction to Encapsulation
- Modulation Techniques
- Summary
- Exam Essentials
- Written Lab

## Chapter 3: Networking Topologies, Connectors, and Wiring Standards

- Physical Media
- Cable Properties
- Wiring Standards
- Installing Wiring Distributions

- Summary
- Exam Essentials
- Written Lab

## Chapter 4: The Current Ethernet Specifications

- Network Basics
- Ethernet Basics
- Ethernet at the Data Link Layer
- Ethernet at the Physical Layer
- Ethernet over Other Standards (IEEE 1905.1-2013)
- Summary
- Exam Essentials
- Written Lab
- Written Lab Answers

## Chapter 5: Networking Devices

- Common Network Connectivity Devices
- Other Specialized Devices
- Planning and Implementing a Basic SOHO Network Using Network Segmentation

- Summary
- Exam Essentials
- Written Lab
- Answer to Written Lab

## Chapter 6: Introduction to the Internet Protocol

- Introducing TCP/IP
- Data Encapsulation
- Summary
- Exam Essentials
- Written Lab

## Chapter 7: IP Addressing

- IP Terminology
- The Hierarchical IP Addressing Scheme
- IPv4 Address Types
- Internet Protocol Version 6 (IPv6)
- Summary

- Exam Essentials
- Written Lab

## Chapter 8: IP Subnetting, Troubleshooting IP, and Introduction to NAT

- Subnetting Basics
- Troubleshooting IP Addressing
- Introduction to Network Address Translation (NAT)
- Summary
- Exam Essentials
- Written Labs

## Chapter 9: Introduction to IP Routing

- Routing Basics
- The IP Routing Process
- Testing Your IP Routing Understanding
- Static and Dynamic Routing
- Summary
- Exam Essentials
- Written Lab

## Chapter 10: Routing Protocols

- Routing Protocol Basics
- Distance Vector Routing Protocols
- Link State Routing Protocols
- High Availability
- IPv6 Routing Protocols
- Summary
- Exam Essentials
- Written Lab

## Chapter 11: Switching and Virtual LANs

- Networking Before Layer 2 Switching
- Switching Services
- Spanning Tree Protocol
- Virtual LANs
- VLAN Trunking Protocol
- Two Additional Advanced Features of Switches

- Summary
- Exam Essentials
- Written Lab

## Chapter 12: Wireless Networking

- Introduction to Wireless Technology
- The 802.11 Standards
- Comparing 802.11 Standards
- Wireless Network Components
- Installing a Wireless Network
- Site Survey
- Wireless Security
- Summary
- Exam Essentials
- Written Lab

## Chapter 13: Authentication and Access Control

- Security Filtering
- Managing User Account and Password Security

- User-Authentication Methods
- Summary
- Exam Essentials
- Written Lab

## Chapter 14: Network Threats and Mitigation

- Recognizing Security Threats
- Vulnerabilities
- Understanding Mitigation Techniques
- Policies and Procedures
- Anti-malware software
- Summary
- Exam Essentials
- Written Lab

## Chapter 15: Physical Security and Risk

- Using Hardware and Software Security Devices
- Defining Firewalls

- Firewall Technologies
- Firewalls at the Application Layer vs the Network Layer
- Scanning Services and Other Firewall Features
- Intrusion Detection and Prevention Systems
- VPN Concentrators
- Understanding Problems Affecting Device Security
- Summary
- Exam Essentials
- Written Lab

## Chapter 16: Wide Area Networks

- What's a WAN?
- T-Series Connections
- Transmission Media
- Broadband Services
- Wireless WAN Technologies
- WAN Protocols
- WAN Troubleshooting



- Summary
- Exam Essentials
- Written Lab

## Chapter 17: Troubleshooting Tools

- Protocol Analyzers
- Throughput Testers
- Connectivity Software
- Using Traceroute
- Using ipconfig and ifconfig
- Using the ping Utility
- Using the Address Resolution Protocol
- Using the nslookup Utility
- Resolving Names with the Hosts Table
- Using the Mtr Command (pathping)
- Using the route Command
- Using the nbtstat Utility
- Using the netstat Utility

- Using the File Transfer Protocol
- Using the Telnet Utility
- Summary
- Exam Essentials
- Written Lab

## Chapter 18: Software and Hardware Tools

- Understanding Network Scanners
- Baseline
- Network Monitoring and Logging
- Identifying Hardware Tools
- Summary
- Exam Essentials
- Written Lab

## Chapter 19: Network Troubleshooting

- Narrowing Down the Problem
- Troubleshooting Steps
- Troubleshooting Tips

- Summary
- Exam Essentials
- Written Lab

## Chapter 20: Management, Monitoring, and Optimization

- Managing Network Documentation
- Network Monitoring
- Network Optimization
- Summary
- Exam Essentials
- Written Lab

## Chapter 21: Appendix A

- N10-006 Exam Objectives
- Videos

## Videos and How To

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

**73**

VIDEOS

**22:39**

HOURS

## 12. Practice Test

**Here's what you get**

**90**

PRE-ASSESSMENTS  
QUESTIONS

**4**

FULL LENGTH TESTS

**90**

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. 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.

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