uCertify

Course Outline

CIW: Network Technology Associate (1D0-61C)



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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: Introduction to Networking

   Chapter 2: Networking Components and Standards

   Chapter 3: Connecting to the Internet

   Chapter 4: Internet Services

   Chapter 5: Hardware and Device Connectivity

   Chapter 6: Network and Cloud Security Risks

   Chapter 7: Appendix A: CIW Web Foundations Objectives and Locations

   Chapter 8: Appendix B: Works Consulted

   Chapter 9: Appendix C: Firewall Topologies

   Videos and How To
9. Practice Test

   Here's what you get

   Features
10. Live labs

    Lab Tasks

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11. Post-Assessment

1. Course Objective

Gain hands-on experience to pass the CIW 1D0-61C exam with the CIW Network Technology Associate course and lab. The lab is cloud-based, device-enabled, and can easily be integrated with an LMS. This Network Technology course comprehensively covers the 1D0-61C exam objectives and imparts skills required to handle network and cloud security risks, hardware, and device connectivity, connectivity through Internet, Internet services, and many 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.



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 Networking

- Overview of Networks and Protocols
- Telephony and Convergence Networking
- Networking Evolution

- Client/Server Model
- Network Operations Center (NOC)
- Networking Categories
- Network Topologies
- Network Operating System
- Microsoft Windows Servers
- UNIX/Linux
- The Need for Protocols
- OSI Reference Model
- Data Encapsulation
- Packets
- OSI/RM Protocol Examples
- Transmission Control Protocol/Internet Protocol (TCP/IP)
- Binding Protocols
- Local Area Network (LAN)
- Wide Area Network (WAN)
- Internet Exchange Point (IXP)

- Lesson Summary

Chapter 2: Networking Components and Standards

- Overview of Networking Components
- Common Network Components
- Transmission Media
- Wireless Network Technologies
- Transmission Types
- IEEE LAN Standards
- Carrier Systems
- Virtualization
- Optional Lab
- Lesson Summary

Chapter 3: Connecting to the Internet

- Introduction to Connecting to the Internet
- Mobile Computing
- Mobile Devices and Cloud Computing
- Configuring a Wireless Network

- Fourth-Generation (4G) Wireless
- TCP/IP
- Internet Architecture
- Internet Protocols
- Demultiplexing
- Introduction to Routing
- Routing Protocols
- Port Numbers
- Internet Protocol Version 4 (IPv4)
- Internet Protocol Version 6 (IPv6)
- Configuring TCP/IP
- Diagnostic Tools for Internet Troubleshooting
- Optional Labs
- Lesson Summary

Chapter 4: Internet Services

- Overview of Internet Services
- Cloud Services

- Internet Servers
- Choosing Web Server Products
- Content Management System (CMS)
- Optional Lab
- Lesson Summary

Chapter 5: Hardware and Device Connectivity

- Introduction to Hardware and Device Connectivity
- Motherboard
- Storage Devices
- Network Interface Card (NIC)
- Optical Discs
- Device Connectivity
- System Management
- Preventive Maintenance
- Software Troubleshooting
- Optional Lab
- Lesson Summary

Chapter 6: Network and Cloud Security Risks

- Importance of Network Security
- Bring Your Own Device (BYOD)
- Cloud Security Threats
- Cloud Disaster Recovery
- Malware (Malicious Software)
- Overview of Network Attack Types
- Defeating Network Attacks
- Authentication
- Encryption
- Firewalls
- Security Zones
- Virtual Private Network (VPN)
- Security Audit
- Other Security Threats
- Lesson Summary

Chapter 7: Appendix A: CIW Web Foundations Objectives and Locations

Chapter 8: Appendix B: Works Consulted

Chapter 9: Appendix C: Firewall Topologies

- Firewall Topologies

Videos and How To

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

26	34
VIDEOS	MINUTES

12. Practice Test

Here's what you get

30	2	43
PRE-ASSESSMENTS QUESTIONS	FULL LENGTH TESTS	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.  Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

Networking Components and Standards

- Viewing the MAC Address on Your System

- Installing VirtualBox and Creating a VM

Connecting to the Internet

- Configuring Different Classes of IP Addresses
- Adding a Public IPv6 Address
- Using the netstat Command
- Using the tracert Command
- Using the arp Command
- Testing Connectivity Using the ping Command
- Using the ipconfig Command
- Using the ifconfig Command

Internet Services

- Using the nslookup Utility
- Sharing a Folder

Hardware and Device Connectivity

- Managing NTFS Permissions
- Converting a FAT32 Partition to NTFS Using PowerShell
- Converting a FAT32 Partition to NTFS Using Disk Management
- Capturing Packets Using Wireshark
- Creating a Partition Using Disk Management
- Formatting a Logical Drive
- Using the chkdsk Command
- Running the Disk Defragmenter
- Backing Up and Restoring Data in Windows

Network and Cloud Security Risks

- Using the Netcraft Toolbar
- Monitoring the Denial of Service (DoS) Attack
- Detecting a Virus in a Folder
- Setting Password Policies

- Using the MD5 Hashing Algorithm
- Using OpenSSL to Create a Public/Private Key Pair
- Applying Symmetric-Key Encryption
- Turning Off Windows Firewall Settings
- Creating a NAT Virtual Network

Here's what you get

30	30	40
LIVE LABS	VIDEO TUTORIALS	MINUTES

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.

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