uCertify

Course Outline

IT Specialist Network Security



29 Mar 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: Introduction

   Chapter 2: Understanding Security Layers

   Chapter 3: Understanding Authentication, Authorization, and Accounting

   Chapter 4: Understanding Security Policies

   Chapter 5: Understanding Network Security

   Chapter 6: Protecting the Server and Client

   Chapter 7: Appendix

   Videos and How To
9. Practice Test

   Here's what you get

   Features
10. Live labs

    Lab Tasks

    Here's what you get
11. Post-Assessment

1. Course Objective

Get hands-on experience in Network Security with the IT Specialist Network Security comprehensive course and lab. The lab provides hands-on learning of Network Security, beginning up with the basics to gain insights into Authentication, Authorization, Accounting, security layers, and protecting the server and clients. This course provides candidates with foundational security knowledge and skills, including an understanding of core security principles operating system security, network, and device security, and secure computing practices. The course and lab provide knowledge in a broad range of IT topics, including software development, database administration, networking and security, mobility and device management, and coding.

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.

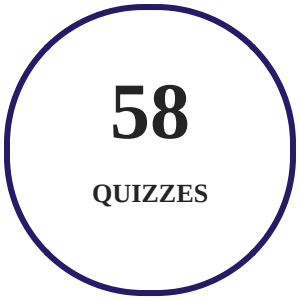
3. Exercises

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.



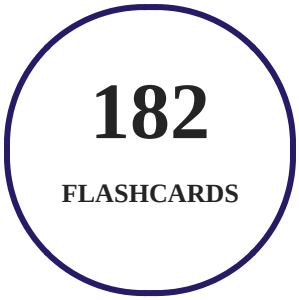
4. Quizzes

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

- Course Opening: How to Study

Chapter 2: Understanding Security Layers

- Introducing Core Security Principles
- Understanding Physical Security as the First Line of Defense
- Performing Threat Modeling
- Skill Summary
- Business Case Scenarios
- Workplace Ready

Chapter 3: Understanding Authentication, Authorization, and Accounting

- Starting Security with Authentication
- Introducing Directory Services with Active Directory
- Comparing Rights and Permissions
- Understanding NTFS
- Sharing Drives and Folders
- Introducing the Registry
- Using Encryption to Protect Data
- Understanding IPsec
- Introducing Smart Cards
- Configuring Biometrics, Windows Hello, and Microsoft Passport

- Using Auditing to Complete the Security Picture
- Skill Summary
- Business Case Scenarios
- Workplace Ready

Chapter 4: Understanding Security Policies

- Understanding Information Security Policies and Their Types
- Using Password Policies to Enhance Security
- Protecting Domain User Account Passwords
- Skill Summary
- Business Case Scenarios
- Workplace Ready

Chapter 5: Understanding Network Security

- Using Dedicated Firewalls to Protect a Network
- Using Isolation to Protect the Network
- Protecting Data with Protocol Security
- Understanding Denial?of?Service (DoS) Attacks
- Skill Summary

- Business Case Scenarios
- Workplace Ready

Chapter 6: Protecting the Server and Client

- Protecting the Client Computer
- Managing Client Security Using Windows Defender
- Protecting Your Email
- Securing Internet Explorer
- Configuring Microsoft Edge
- Protecting Your Server
- Using Security Baselines
- Locking Down Devices to Run Only Trusted Applications
- Managing Windows Store Apps
- Skill Summary
- Business Case Scenarios
- Workplace Ready

Chapter 7: Appendix

- Exam Tips

Videos and How To

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

113	03:51
VIDEOS	HOURS

12. Practice Test

Here's what you get

40	2	40
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

Understanding Authentication, Authorization, and Accounting

- Creating OUs in a Domain
- Using a Hashing Algorithm
- Moving Objects into an OU
- Creating a GPO
- Changing NTFS Permissions on a Folder
- Copying Files

- Moving Files
- Understanding Permission Inheritance
- Using Groups to Assign Permissions
- Sharing a Folder
- Encrypting a Folder with the EFS
- Encrypting the Drive Using BitLocker
- Performing Symmetric Encryption
- Performing Asymmetric Encryption
- Creating a VPN Connection
- Configuring an IPsec Policy
- Changing the Audit Policy
- Modifying Kerberos Security Settings

Understanding Security Policies

- Configuring the Domain Password Policy
- Configuring the Account Lockout Policy
- Creating a Domain User Account

Understanding Network Security

- Scanning Ports Using Nmap
- Implementing a Packet Filter
- Using Honeypot
- Performing a SYN Flood Attack

Protecting the Server and Client

- Taking an Incremental Backup
- Taking a Full Backup
- Customizing User Account Notification Settings
- Encrypting Offline Files
- Controlling How Updates Are Applied
- Scanning Using Windows Defender
- Configuring Pop-up Blocker Settings
- Enabling IE ESC for Administrators

- Performing a Phishing Attack
- Installing DHCP Server
- Capturing Network Traffic Using Network Monitor
- Performing an MBSA Scan
- Configuring Folder Attributes

Here's what you get

38	36	51
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.

GET IN TOUCH:

3187 Independence Drive
Livermore, CA 94551,
United States

+1-415-763-6300

support@ucertify.com

www.ucertify.com