

**uCertify**

# Course Outline

**IT Security Expert**



16 May 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: Security fundamentals

Chapter 3: Risk management

Chapter 4: Organizational security

Chapter 5: Cryptography

Chapter 6: Network connectivity

Chapter 7: Secure network configuration

Chapter 8: Authentication

Chapter 9: Access control

Chapter 10: Enterprise architecture

Chapter 11: Secure assets

Chapter 12: Securing specialized systems

Chapter 13: Secure applications

Chapter 14: Disaster planning and recovery

Chapter 15: Threat detection and response

Videos and How To

9. Practice Test

Here's what you get

## Features

### 10. Live labs

#### Lab Tasks

Here's what you get

## 1. Course Objective

The IT Security Expert course is an advanced training program designed to equip professionals with in-depth knowledge and practical skills in cybersecurity. Covering topics such as penetration testing, incident response, cryptography, and advanced threat detection, this course prepares individuals to tackle complex security challenges in today's evolving threat landscape. Through hands-on labs and expert instruction, participants gain the expertise needed to protect organizations against sophisticated cyber threats and mitigate security risks effectively.

## 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.

**266**  
EXERCISES

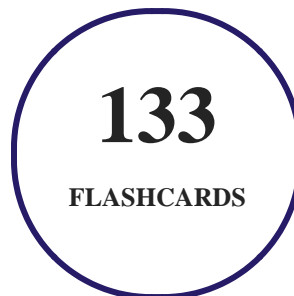
## 4. Quizzes

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

- What Is the Security Expert Certification?

#### Chapter 2: Security fundamentals



- Module A: Security concepts
- Module B: Understanding threats
- Module C: Enterprise security strategy
- Summary

### Chapter 3: Risk management

- Module A: Risk management programs
- Module B: Security audits
- Module C: Conducting security assessments
- Summary

### Chapter 4: Organizational security

- Module A: Social engineering
- Module B: Security policies
- Module C: User roles and training
- Summary

### Chapter 5: Cryptography

- Module A: Cryptography concepts

- Module B: Public key infrastructure
- Summary

## Chapter 6: Network connectivity

- Module A: Network attacks
- Module B: Packet flow
- Summary

## Chapter 7: Secure network configuration

- Module A: Network security components
- Module B: Secure network protocols
- Module C: Hardening networks
- Summary

## Chapter 8: Authentication

- Module A: Authentication factors
- Module B: Authentication protocols
- Summary

## Chapter 9: Access control

- Module A: Access control principles
- Module B: Account management
- Summary

## Chapter 10: Enterprise architecture

- Module A: System vulnerabilities
- Module B: System architecture
- Summary

## Chapter 11: Secure assets

- Module A: Physical security and safety
- Module B: Securing data
- Summary

## Chapter 12: Securing specialized systems

- Module A: Securing hosts
- Module B: Mobile security
- Summary

## Chapter 13: Secure applications

- Module A: Application attacks
- Module B: Securing applications
- Summary

## Chapter 14: Disaster planning and recovery

- Module A: Secure operations
- Module B: Resilience and recovery
- Summary

## Chapter 15: Threat detection and response

- Module A: Security monitoring
- Module B: Incident response procedures
- Summary

## 12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

## Here's what you get

**90**

PRE-ASSESSMENTS QUESTIONS

**2**

FULL LENGTH TESTS

## 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

### **Risk management**

- Gathering Site Information
- Footprinting a Website

### **Organizational security**

- Using Anti-phishing Tools

### **Cryptography**

- Using Symmetric Encryption
- Creating Asymmetric Key Pairs
- Creating File Hashes
- Examining PKI Certificates
- Creating Certificates with OpenSSL

### **Network connectivity**

- Launching a DoS Attack
- Capturing Credentials On-path
- Cracking Passwords
- Using Uncomplicated Firewall in Linux
- Configuring a Network Firewall

### **Secure network configuration**

- Requesting PKI Certificates
- Securing a Wi-Fi Hotspot
- Scanning the Network

## **Authentication**

- Installing a RADIUS Server
- Examining Kerberos Settings
- Examining Active Directory Objects

## **Access control**

- Delegating Control in Active Directory
- Enforcing Password Policies
- Creating a Windows Domain User
- Creating Linux Users and Groups

## **Enterprise architecture**

- Examining Spyware
- Detecting Virtualization

## **Secure assets**

- Assigning NTFS Permissions

## **Securing specialized systems**

- Creating a Security Template
- Enforcing a Security Template

## **Secure applications**

- Exploiting an Overflow Vulnerability
- Exploiting a TOCTOU Vulnerability
- Performing SQL Injection in DVWA
- Performing an XSS Attack in DVWA
- Examining Application Vulnerabilities

## **Disaster planning and recovery**

- Scheduling a Server Backup

### Threat detection and response

- Viewing Windows Event Logs
- Viewing Linux Event Logs

## Here's what you get

**36**

LIVE LABS

**35**

VIDEO TUTORIALS

**01:29**

HOURS

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