# uCertify

# Course Outline

## CompTIA Security (SY0-601)

05 May 2024

# 1. 📖 Course Objective

Gain hands-on experience to pass the CompTIA Security+ certification exam with the CompTIA Security+ SY0-601 course and lab. The lab comes with a well-organized component library for every task. The course and lab cover the exam objectives and will help you get a full understanding of the challenges you'll face as a security professional.

# 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. ⏱ 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.

**163**
QUIZZES
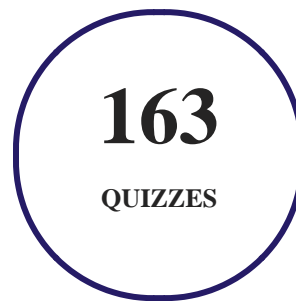
# 4. ⚡ flashcards

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.

**100**

**FLASHCARDS**

## 5. 📖 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.

**100**

**GLOSSARY OF TERMS**

## 6. 👥 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.

## 7. ⊛ 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.

# 8. 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.

# 9. 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

# 10. ⚙ 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

Chapter 2: Security fundamentals

- Module A: Security concepts

- Module B: Enterprise security strategy

- Module C: Security program components

- Summary

Chapter 3: Risk management

## Chapter 7: Secure network configuration

- Module A: Secure network protocols

- Module B: 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: Securing hosts and data

- Module A: Malware

- Module B: Securing data

- Module C: Securing hosts

- Module B: Security policies

- Module C: User roles and training

- Module D: Physical security and safety

- Summary

Chapter 15: Disaster planning and recovery

- Module A: Business continuity

- Module B: Resilient systems

- Module C: Incident response procedures

- Summary

# Videos and How To

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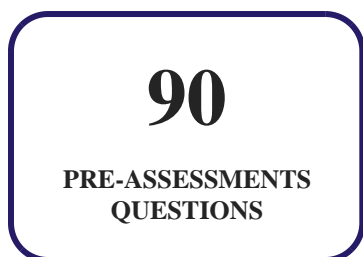
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| **VIDEOS** | **HOURS** |

## 11. Practice Test

# Here's what you get

| **90** | **2** | **90** |
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| **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.

# 12. 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

**Introduction**

- Security+ sandbox

**Risk management**

- Using Reconnaissance Tools
- Gathering Site Information
- Performing Session Hijacking Using Burp Suite
- Using Maltego
- Cracking a Linux Password Using John the Ripper
- Using the hping Program
- Using the theHarvester Tool to Gather Information about a Victim
- Conducting Vulnerability Scanning Using Nessus

**Cryptography**

- Observing an MD5-Generated Hash Value
- Observing an SHA-Generated Hash Value
- Examining Asymmetric Encryption
- Performing Symmetric Encryption
- Hiding Text Using Steganography
- Examining PKI Certificates

**Network connectivity**

- Simulating a DoS Attack
- Using Rainbow Tables to Crack Passwords

- Performing ARP Spoofing
- Defending against IP Spoofing
- Simulating an Eavesdropping Attack
- Cracking Passwords
- Using Windows Firewall
- Configuring the Network-based Firewall
- Configuring a BPDU Guard on a Switch Port
- Implementing Port Security
- Configuring a Standard ACL
- Configuring Network Address Translation
- Changing Firewall Rules and Setting Up IPS Rules

**Network security technologies**

- Setting up a Honeypot on Kali Linux
- Examining File Manipulation Commands
- Making Syslog Entries Readable
- Capturing the TCP Header with Wireshark
- Using Event Viewer
- Viewing Linux event logs

**Secure network configuration**

- Setting Up a VPN Server with Windows Server 2016
- Creating PGP Certification
- Securing a Wi-Fi Hotspot
- Performing an Intense Scan in Zenmap
- Configuring VLANs

**Authentication**

- Installing a RADIUS Server
- Examining Kerberos Settings

**Access control**

- Creating Active Directory Groups
- Delegating Control in Active Directory
- Creating a Domain User
- Enforcing Password Policies

**Securing hosts and data**

- Using an Anti-Spyware Tool
- Managing NTFS Permissions
- Configuring Lockout Policies
- Using the chmod Command
- Creating a Security Template

**Securing specialized systems**

- Setting Up a VPN in Android

**Application security**

- Defending Against a Buffer Overflow Attack
- Attacking a Website Using XSS Injection
- Exploiting a Website Using SQL Injection

**Organizational security**

- Using Anti-phishing Tools
- Using Social Engineering Techniques to Plan an Attack

# Here's what you get

| 56 | 55 | 01:55 |
|:---:|:---:|:---:|
| **LIVE LABS** | **VIDEO TUTORIALS** | **HOURS** |

## 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.

## GET IN TOUCH:

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