

# uCertify

## Course Outline

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**CompTIA PenTest+ PT0-001  
Cert Guide**



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## 1. Course Objective

Pass the CompTIA PenTest+ PT0-001 exam with the CompTIA PenTest+ PT0-001 course and lab. The lab simulates real-world, hardware, software and command line interface environments and can be mapped to any text-book, course or training. The course and lab cover all the objectives of the CompTIA PenTest+ PT0-001 exam and helps you to gain skills on topics of penetration testing such as planning and scoping a penetration testing assessment, exploiting wired and wireless networks, exploiting application-based vulnerabilities, performing post-exploitation techniques, understanding how to finalize a penetration test, and 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. Quizzes

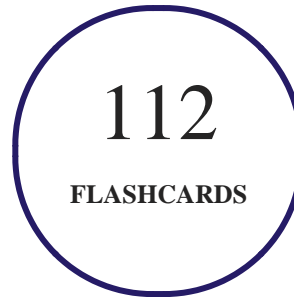
Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

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QUIZZES

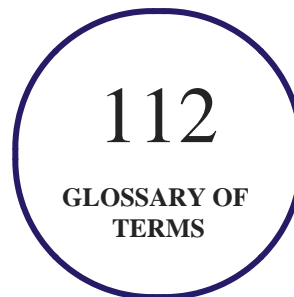
## 4. Flashcards

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.



## 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.



## 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 assignments. 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 5 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

## 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: Introduction to Ethical Hacking and Penetration Testing

- Understanding Ethical Hacking and Penetration Testing
- Understanding the Current Threat Landscape
- Exploring Penetration Testing Methodologies
- Building Your Own Lab
- Review All Key Topics

### Chapter 3: Planning and Scoping a Penetration Testing Assessment

- Explaining the Importance of the Planning and Preparation Phase
- Understanding the Legal Concepts of Penetration Testing
- Learning How to Scope a Penetration Testing Engagement Properly
- Learning the Key Aspects of Compliance-Based Assessments
- Review All Key Topics

### Chapter 4: Information Gathering and Vulnerability Identification



- Understanding Information Gathering and Reconnaissance
- Understanding the Art of Performing Vulnerability Scans
- Understanding How to Analyze Vulnerability Scan Results
- Review All Key Topics

## Chapter 5: Social Engineering Attacks

- Understanding Social Engineering Attacks
- Phishing
- Pharming
- Malvertising
- Spear Phishing
- SMS Phishing
- Voice Phishing
- Whaling
- Elicitation, Interrogation, and Impersonation (Pretexting)
- Social Engineering Motivation Techniques
- Shoulder Surfing

- USB Key Drop and Social Engineering
- Review All Key Topics

## Chapter 6: Exploiting Wired and Wireless Networks

- Exploiting Network-Based Vulnerabilities
- Exploiting Wireless and RF-Based Attacks and Vulnerabilities
- Review All Key Topics

## Chapter 7: Exploiting Application-Based Vulnerabilities

- Overview of Web Applications for Security Professionals
- How to Build Your Own Web Application Lab
- Understanding Injection-Based Vulnerabilities
- Exploiting Authentication-Based Vulnerabilities
- Exploiting Authorization-Based Vulnerabilities
- Understanding Cross-Site Scripting (XSS) Vulnerabilities
- Understanding Cross-Site Request Forgery Attacks
- Understanding Clickjacking
- Exploiting Security Misconfigurations
- Exploiting File Inclusion Vulnerabilities

- Exploiting Insecure Code Practices
- Review All Key Topics

## Chapter 8: Exploiting Local Host and Physical Security Vulnerabilities

- Exploiting Local Host Vulnerabilities
- Understanding Physical Security Attacks
- Review All Key Topics

## Chapter 9: Performing Post-Exploitation Techniques

- Maintaining Persistence After Compromising a System
- Understanding How to Perform Lateral Movement
- Understanding How to Cover Your Tracks and Clean Up Systems After a Penetration Testing Engagement
- Review All Key Topics

## Chapter 10: Penetration Testing Tools

- Understanding the Different Use Cases of Penetration Testing Tools and How to Analyze Their Output
- Leveraging Bash, Python, Ruby, and PowerShell in Penetration Testing Engagements
- Review All Key Topics

## Chapter 11: Understanding How to Finalize a Penetration Test

- Explaining Post-Engagement Activities
- Surveying Report Writing Best Practices
- Understanding Report Handling and Communications Best Practices
- Review All Key Topics

### 11. 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

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PRE-ASSESSMENTS QUESTIONS

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POST-ASSESSMENTS QUESTIONS

#### Features

**Full Remediation**

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.

### Learn, Test and Review Mode

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. Performance Based Labs

uCertify's performance-based labs are Live Labs. Learn the real world skills using Live Labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

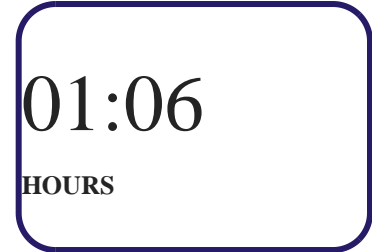
### Lab Tasks

- Drag the type of malicious attacker to its description.

- Select the penetration testing methodologies from the lists.
- Fill in the blank by selecting the appropriate professional from the list.
- Click to select the requirements for penetration testing labs.
- Fill in the blanks by selecting the appropriate types of assessments from the lists.
- Fill in the blanks by dragging the appropriate teams from the bottom onto their correct boxes.
- Using DNSRecon
- Performing Nmap SYN Scan
- Performing Nmap UDP Scan
- Performing Nmap FIN Scan
- Using Nmap for Host Enumeration
- Using Nmap for User Enumeration
- Using Nmap for Group Enumeration
- Using Nmap to Perform recon
- Using Nmap for Web Application Enumeration
- Using Nmap for Network Enumeration
- Performing Domain Enumeration
- Using DNSdumpster
- Using Recon-ng
- Performing Zone Transfer Using dig
- Performing Automated Vulnerability Scanning
- Using the SET Tool
- Exploiting SMB
- Exploiting SNMP
- Exploiting SMTP
- Understanding the Pass-the-hash Attack
- Using Searchsploit
- Performing ARP Spoofing
- Performing the Man-in-the-Middle Attack
- Performing DHCP Starvation Attack
- Understanding MAC Bypass
- Simulating DDoS Attack
- Using the EternalBlue Exploit in Metasploit
- Exploiting SQL Injection Vulnerabilities
- Exploiting Blind SQL Injection Vulnerabilities
- Exploit PHP Object Injection

- Exploiting the Stored (Persistent) XSS Attack
- Exploiting the DOM-Based XSS Attack
- Exploiting the Reflected XSS Attack
- Exploiting the Cross-site Request Forgery (CSRF or XSRF) Attacks
- Exploiting Command Injection Vulnerabilities
- Understanding Credential based Brute-force Attack
- Performing Session Hijacking
- Exploiting Local File Inclusion Vulnerabilities
- Exploiting Remote File Inclusion Vulnerabilities
- Understanding SUID or SGID and Unix Program
- Understanding Local Privilege Escalation
- Exploiting SAM Database
- Using Apktool to Decode and Analyze apk File
- Creating Reverse and Bind Shells using Netcat
- Using the Metasploit RDP Post-Exploitation Module
- Using Nslookup for Passive Reconnaissance
- Using Dig for Passive Reconnaissance
- Using ExifTool
- Using the theHarvester Tool to Gather Information about a Victim
- Using Nikto
- Using Burp and the OWASP ZAP Attack Proxy
- Using meterpreter
- Using Bash for Penetration Testing
- Using Python for Penetration Testing
- Using PowerShell for Penetration Testing
- Using Maltego
- Using Zenmap
- Using OpenVAS
- Using the Dradis Framework CE on Kali Linux
- Studying the Communication Plan and the Main Elements of a Pen Test Report

## Here's what you get



### 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.

Have Any Query? We Are Happy To Help!

### GET IN TOUCH:

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■ Email: [sales@ucertify.com](mailto:sales@ucertify.com)

■ [www.uCertify.com](http://www.uCertify.com)