

uCertify

Course Outline

An In-Depth Guide To Mobile Device Forensics



26 Apr 2025

1. Pre-Assessment
2. Exercises, Quizzes, Flashcards & Glossary
Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons

Syllabus

Chapter 1: Wireless Basics

Chapter 2: Mobile Hardware and Operating Systems

Chapter 3: iOS Operating System

Chapter 4: Android Operating System

Chapter 5: iOS Forensics

Chapter 6: Android Forensics

Chapter 7: JTAG and Chip-Off

Chapter 8: SQLite Database Forensics

Chapter 9: Cell Site Analysis and Smart TV Forensics

Chapter 10: Anti Forensics

Chapter 11: Legal Issues

Videos and How To

8. Practice Test

Here's what you get

Features

9. Live labs

Lab Tasks

Here's what you get

1. 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.

2. 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.

64
EXERCISES

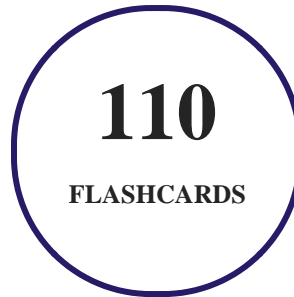
3. Quiz

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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QUIZ

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 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: Wireless Basics

- Introduction
- Electromagnetic Waves
- Radio Waves and Computer Networking
- Multiple Access
- Cellular Technology
- Cellular Networks
- GSM

- Edge
- Umts
- Lte
- 5G
- Cell System Components
- 3Gpp
- Other Wireless Transmissions
- Lesson Summary

Chapter 2: Mobile Hardware and Operating Systems

- Introduction
- Hardware
- CPU
- Other Devices
- Software-Defined Radio
- Lesson Summary

Chapter 3: iOS Operating System

- Operating System Fundamentals

- iOS Basics
- File System
- Hardware Details
- iPhone Security
- Lesson Summary

Chapter 4: Android Operating System

- Android Basics
- Specialized Key Codes
- Working with Android
- ADB
- Rooting Android
- EDL Mode
- Operating System Details
- Boot Process
- File Systems
- Security
- General Architecture

- Tools
- Deep Into Android Code
- Lesson Summary

Chapter 5: iOS Forensics

- Forensic Procedures
- iOS Specific Processes
- Lesson Summary

Chapter 6: Android Forensics

- ADB
- Android Only Tools
- Dual Use Tools
- Oxygen Forensics
- MobilEdit
- Android App DECOMPILING
- Lesson Summary

Chapter 7: JTAG and Chip-Off

- Boundary Scanning
- JTAG Standards
- IEEE 1149
- Chip-off
- Lesson Summary

Chapter 8: SQLite Database Forensics

- Relational Databases
- SQLite Basics
- Other Viewers
- Lesson Summary

Chapter 9: Cell Site Analysis and Smart TV Forensics

- Introduction
- Cell Site Analysis
- Smart Televisions
- Lesson Summary

Chapter 10: Anti Forensics

- Introduction
- Phone Locking
- Steganography
- Cryptography
- Password Cracking
- Lesson Summary

Chapter 11: Legal Issues

- Introduction
- Rules of Evidence
- Warrants
- Ethics
- Types of Investigations
- Private Investigator Licenses
- The Scientific Method
- The Forensic Report
- Quality Control
- Lesson Summary

11. Practice Test

Here's what you get

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

Wireless Basics

- Securing a Wi-Fi Transmission

Mobile Hardware and Operating Systems

- Tracing Connections in Wi-Fi Forensics
- Identifying SIM Ownership Using ICCID Analysis

iOS Operating System

- Downloading and Installing 3uTools
- Jailbreaking an iPhone Exploring Customization and Risks
- Ensuring Evidence Integrity by Setting a Secure Passcode on iPhone

Android Operating System

- Using Specialized Key Codes
- Using Android Studio to Create an Android Virtual Device
- Accessing a Device Using ADB
- Understanding File Systems

iOS Forensics

- Using iMazing to Backup iPhone for Money Fraud Case
- Recovering a Lost Forensic Document with UltData
- Investigating Insider Data Theft in a Medical Lab with Dr.Fone
- Utilizing iMyFone D-Back for Data Recovery

Android Forensics

- Investigating Audio Evidence Transfer Using ADB
- Understanding Android Tools
- Decompiling and Analyzing an Android App

JTAG and Chip-Off

- Recovering iPhone Data using NAND Flash Memory with Easy JTAG

SQLite Database Forensics

- Managing Databases and Executing Queries in the SQLite Browser

Cell Site Analysis and Smart TV Forensics

- Extracting Video Evidence Using ADB in Digital Forensics

Anti Forensics

- Hiding Text using Steganography
- Using DeepSound
- Generating and Storing File Hashes
- Performing Asymmetric Encryption
- Performing Symmetric Encryption

Legal Issues

- Completing the Chain of Custody

Here's what you get

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LIVE LABS

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VIDEO TUTORIALS

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MINUTES

You can't stay away! Get

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