uCertify

Course Outline

CompTIA A+ (220-1002)

05 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: Operating System Basics

   Chapter 3: Operating System Administration

   Chapter 4: Working with Windows 10

   Chapter 5: Working with Windows 8/8.1

   Chapter 6: Working with Windows 7

   Chapter 7: Working with macOS and Linux

   Chapter 8: Scripting and Remote Access

   Chapter 9: Security Concepts

   Chapter 10: Securing Operating Systems

   Chapter 11: Troubleshooting Operating Systems and Security

   Chapter 12: Documentation and Professionalism

   Chapter 13: Safety and Environmental Concerns

   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

Create new career opportunities by being CompTIA A+ certified with the CompTIA A+ (220-1002) course and lab. The lab is versatile and delivers a hands-on experience, replacing expensive physical labs. The CompTIA A+ study guide completely covers the CompTIA A+ exam objectives and offers a hands-on learning experience in areas such as operating systems, security, software troubleshooting, operational procedures, and so on.

2. Pre-Assessment

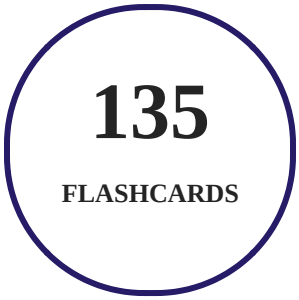
Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

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.

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: Introduction

- What Is A+ Certification?
- What Does This Course Cover?
- The CompTIA A+ Exam Objectives

Chapter 2: Operating System Basics

- Understanding Operating Systems
- Preparing for the Exam
- Summary

- Exam Essentials

Chapter 3: Operating System Administration

- Interacting with Operating Systems
- Administrative Tools
- Disk Management
- Summary
- Exam Essentials

Chapter 4: Working with Windows 10

- Introduction to Windows 10
- Installing Windows 10
- Booting the Windows 10 Operating System
- Windows Applications
- Networking in Windows 10
- Summary
- Exam Essentials

Chapter 5: Working with Windows 8/8.1

- Windows Editions
- Installing Windows 8
- Windows 8 Boot Methods
- Summary
- Exam Essentials

Chapter 6: Working with Windows 7

- Windows 7 Editions
- Installing Windows 7
- Booting the Windows 7 Operating System
- Windows 7 Features
- Windows 7 Administrative Tools
- Windows 7 Control Panel Utilities
- Networking and Windows 7
- Summary
- Exam Essentials

Chapter 7: Working with macOS and Linux

- Best Practices
- Tools
- Features
- Basic Linux Commands
- Summary
- Exam Essentials

Chapter 8: Scripting and Remote Access

- Scripting
- Remote Access
- Summary
- Exam Essentials

Chapter 9: Security Concepts

- Physical Security Concepts
- Logical Security
- Network Policies
- Common Security Threats
- Common Software Threats

- Mitigating Software Threats
- Destruction and Disposal Methods
- Securing a SOHO Network (Wireless)
- Securing a SOHO Network (Wired)
- Summary
- Exam Essentials

Chapter 10: Securing Operating Systems

- Workstation Security Best Practices
- Working with Windows OS Security Settings
- Mobile Device Security
- Summary
- Exam Essentials

Chapter 11: Troubleshooting Operating Systems and Security

- Troubleshooting Microsoft Windows OS Problems
- Troubleshooting Security Issues
- Best Practices for Malware Removal

- Troubleshooting Mobile Issues
- Troubleshooting Mobile Security Issues
- Summary
- Exam Essentials

Chapter 12: Documentation and Professionalism

- Documentation and Change Management
- Disaster Prevention and Recovery
- Demonstrating Professionalism
- Summary
- Exam Essentials

Chapter 13: Safety and Environmental Concerns

- Understanding Safety Procedures
- Understanding Environmental Controls
- Understanding Policies, Licensing, and Privacy
- Summary
- Exam Essentials

Videos and How To

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

58	16:39
VIDEOS	HOURS

11. Practice Test

Here's what you get

90	3	90
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

Operating System Basics

- Adding an MMC snap-in
- Displaying Windows PowerShell snap-ins
- Creating a Restore Point
- Using Cortana
- Enabling BranchCache
- Implementing EFS File Sharing
- Using Windows Event Viewer
- Disabling a Service

- Configuring Computer Management Services
- Using MSConfig
- Using Task Manager to Start an Application
- Configuring Windows Defender Firewall
- Setting Automatic Windows Update
- Creating a Loop in PowerShell
- Creating and Running a ps1 File
- Creating Variables
- Executing the Basic Commands through a ps1 File

Operating System Administration

- Uninstalling a Program
- Entering Commands at the Command-line
- Observing the Control Panel options in different views
- Using the nbtstat command
- Using the netstat Command
- Using the nslookup Command
- Using the ping Command
- Tracing Route Using Tracert
- Mounting a Drive to a Folder
- Managing NTFS Permissions
- Converting a FAT32 Partition to NTFS
- Converting a Basic Disk to a Dynamic Disk
- Viewing the Status of a Disk
- Editing a Drive Letter

Working with Windows 10

- Displaying Windows Versions
- Joining Workgroups or Domains
- Changing Network Locations
- Managing Offline Files
- Sharing a Printer
- Sharing Folders

- Using the net Command
- Creating a Dial-up Connection
- Connecting to a Remote Computer using a Remote Desktop Connection
- Creating a Remote Access VPN Connection
- Configuring a Proxy Server

Working with macOS and Linux

- Using Basic Linux Commands
- Listing Files in a Directory
- Verifying the Working Directory
- Working with Directories
- Performing a Text Search

Security Concepts

- Using a Symmetric Encryption Algorithm
- Using an Asymmetric Encryption Algorithm
- Identifying Virus Threats
- Reviewing the Top 10 OWASP Attacks
- Conducting a DoS Attack using Smurf Attack
- Performing a MITM Attack
- Conducting IP Spoofing
- Using Windows Security

Securing Operating Systems

- Stopping Permissions Inheritance
- Propagating Permissions
- Removing a Credential
- Configuring an Audit Group Policy
- Configuring an Account Password Policy
- Disabling AutoPlay
- Configuring Screensavers
- Securing User Accounts
- Creating a New User

- Using BitLocker

Troubleshooting Operating Systems and Security

- Locking an iPhone with a Password

Documentation and Professionalism

- Backing up Files
- Restoring Files

Safety and Environmental Concerns

- Setting Up a Surge Protected Computer System
- Using a UPS to Power the Computer Components and Ensure the Network Connectivity

Here's what you get

70	66	02:57
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.