Course Ou

CompTIA A+ Core 1 (220-1
(220-1002)



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1. Course Objective

Prepare for the CompTIA A+ certification exams using the CompTIA A+ study guide. The CompTIA A+ training course comes with labs that are versatile and delivers hands-on experience, replacing expensive physical labs. The CompTIA A+ certification course comprehensively covers the A+ 1001 and 1002 exam objectives and provides expertise in the areas such as installing and configuring operating systems, and network and software troubleshooting.

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.

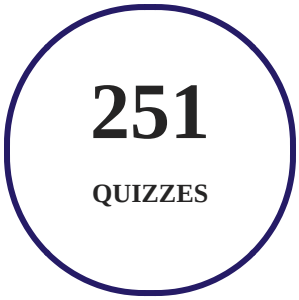
3. Exercises

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.



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

- Goals and Methods
- How the course Is Organized
- What’s New?

- Who Should Read This course?
- Strategies for Exam Preparation

Chapter 2: Mobile Devices

- Install and Configure Laptop Hardware and Components
- Install Components Within the Display of a Laptop
- Use Appropriate Laptop Features
- Characteristics of Other Mobile Devices
- Accessories and Ports Used by Other Mobile Devices
- Basic Mobile Device Network Connectivity and Application Support
- Methods to Perform Mobile Device Synchronization
- Review All the Key Topics
- Review Questions

Chapter 3: Networking

- TCP and UDP Ports, Protocols, and Their Purposes
- Networking Hardware Devices
- Install and Configure a Basic Wired/Wireless SOHO Network

- Compare and Contrast Wireless Networking Protocols
- Summarize the Properties and Purposes of Services Provided by Networked Hosts
- Network Configuration Concepts
- Internet Connection Types, Network Types, and Their Features
- Using Networking Tools
- Review All the Key Topics
- Review Questions

Chapter 4: Hardware

- Basic Cable Types
- Common Connectors
- Installing RAM Types
- Installing Storage Devices
- Installing Motherboards, CPUs, and Add-on Cards
- Peripheral Types
- Power Supplies
- Custom Components
- Common Devices

- SOHO Multifunction Devices
- Print Technologies
- Review All the Key Topics
- Review Questions

Chapter 5: Virtualization and Cloud Computing

- Common Cloud Models
- Client-Side Virtualization Overview
- Review All the Key Topics
- Review Question

Chapter 6: Hardware and Network Troubleshooting

- Troubleshooting Methodology
- Troubleshooting Motherboard, RAM, CPU, and Power Issues
- Recommended Tools
- Troubleshooting Hard Drives and RAID Arrays
- Troubleshooting Video, Projector, and Display Issues
- Mobile Device Troubleshooting
- Printer Troubleshooting

- Network Troubleshooting
- Review All the Key Topics
- Review Questions

Chapter 7: Operating Systems

- Common Operating Systems
- Microsoft Windows Versions
- OS Installation and Upgrade Methods
- Command Line Tools
- Operating System Features and Tools
- Control Panel Utilities
- Summary of Installation and Configuration Concepts
- Networking Microsoft Windows
- macOS and Linux
- Review All the Key Topics
- Review Questions

Chapter 8: Security

- Physical Security Measures
- Logical Security Concepts
- Wireless Security Protocols and Authentication
- Malware Removal and Prevention
- Social Engineering Threats and Vulnerabilities
- Microsoft Windows OS Security Settings
- Security Best Practices to Secure a Workstation
- Securing Mobile Devices
- Data Destruction and Disposal
- Configuring Security on SOHO Networks
- Review All the Key Topics

Chapter 9: Software Troubleshooting

- Troubleshooting Microsoft Windows OS Problems
- Troubleshooting PC Security Issues
- Best Practice Procedure for Malware Removal
- Troubleshoot Mobile OS and Application Issues
- Troubleshoot Mobile OS and Application Security Issues

- Review All the Key Topics
- Review Questions

Chapter 10: Operational Procedures

- Best Practices and Documentation
- Change Management
- Disaster Prevention and Recovery
- Explain Common Safety Procedures
- Environmental Impacts and Appropriate Controls
- Addressing Prohibited Content or Activity
- Communication Techniques and Professionalism
- Scripting Basics
- Remote Access Technologies
- Review All the Key Topics
- Review Questions

Videos and How To

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

13	02:02
VIDEOS	HOURS

12. Practice Test

Here's what you get

180	5	180
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.

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

Mobile Devices

- Installing Laptop Components
- Configuring the Screen Resolution Setting
- Changing the Resolution Setting
- Configuring a Power Plan
- Viewing the iOS Version of an iPhone
- Setting Up a VPN in Android
- Removing an Account in Android
- Configuring an Email in Android
- Turning on Airplane Mode of an iPhone

Networking

- Configuring an IPv4 address
- Configuring an IPv6 address
- Installing a DHCP Server
- Assigning Different Classes of IP Address

- Scanning using Wireshark
- Configuring VLANs
- Configuring a Router
- Configuring Port Security on an Access Port
- Examining an Intrusion Detection Policy
- Configuring SSH in a Router
- Connecting Systems to the Internet Through a Firewall Router
- Connecting a Router to the Laptop
- Connecting a Workstation to the LAN and Configuring IPv4 Properties

Hardware

- Connecting the Cable Modem to Access Internet
- Connecting a USB Printer to a Computer
- Connecting the Hub with Different Devices Using USB Cables
- Enabling a Device Driver
- Disabling a Device Driver
- Setting Up a Boot Device Priority
- Accessing BIOS Setup in Windows 10
- Viewing the Processor Information
- Verifying RAM Usage
- Installing Memory Modules
- Creating a Swap Partition
- Connecting the Motherboard to the Internal Hard Drive
- Inserting a CD on a Laptop
- Copying Files to a Disc Using File Explorer
- Inserting a Pen Drive into the USB Port
- Removing a Pen Drive from a Computer
- Installing a PCI Sound Card
- Identifying a PCI-Bus Slot
- Assembling Computer Components
- Installing Motherboard Components
- Installing an Optical Drive and a PCI Sound Card
- Installing a USB 3.0 PCI Express Card (2.0 x4)
- Providing Cooling and Ventilation to a Motherboard

- Identifying a CPU Socket
- Supplying Power to a SATA Drive
- Installing Firewire Cards
- Installing Expansion Cards on a Motherboard
- Installing a NIC
- Adding a Keyboard Layout
- Configuring Mouse Settings
- Connecting Speakers to a Computer
- Replacing the Power Supply
- Installing SMPS and Connecting it to the Motherboard
- Replacing the Battery of a Smartphone and Inserting a Memory Card
- Inserting Ink Cartridges into a Printer
- Installing a Printer

Virtualization and Cloud Computing

- Using OneDrive
- Configuring OneDrive
- Installing Ubuntu
- Installing Windows 10

Operating Systems

- Managing NTFS Permissions
- Converting a FAT32 Partition to NTFS
- Using the nbtstat command
- Using the netstat Command
- Using the nslookup Command
- Using the ping Command
- Tracing Route Using Tracert
- Entering Commands at the Command-line
- Creating and Running a ps1 File
- Disabling a Service
- Executing the Basic Commands through a ps1 File
- Creating Variables

- Creating a Loop in PowerShell
- Enabling BranchCache
- Implementing EFS File Sharing
- Displaying Windows Versions
- Adding an MMC snap-in
- Displaying Windows PowerShell snap-ins
- Creating a Restore Point
- Using Cortana
- Using Windows Event Viewer
- Converting a Basic Disk to a Dynamic Disk
- Setting Automatic Windows Update
- Viewing the Status of a Disk
- Mounting a Drive to a Folder
- Editing a Drive Letter
- Using MSConfig
- Using Task Manager to Start an Application
- Configuring Windows Defender Firewall
- Configuring Computer Management Services
- Observing the Control Panel options in different views
- Uninstalling a Program
- Joining Workgroups or Domains
- 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
- Changing Network Locations
- Managing Offline Files
- Sharing a Printer
- Sharing Folders
- Using the net Command
- Using Basic Linux Commands
- Listing Files in a Directory
- Verifying the Working Directory
- Working with Directories
- Performing a Text Search

Security

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

Software Troubleshooting

- Locking an iPhone with a Password

Operational Procedures

- Backing up Files
- Restoring Files
- 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

132	125	03:33
LIVE LABS	VIDEO TUTORIALS	HOURS

14. 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:

3187 Independence Drive
Livermore, CA 94551,
United States

+1-415-763-6300

support@ucertify.com

www.ucertify.com