

uCertify

Course Outline

CompTIA A+ Core 1 (220-1201) and Core 2
(220-1202)



30 Oct 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: Introduction Volume 1: Core 1 Exam 220-1201
Chapter 2: Motherboards, Processors, and Memory
Chapter 3: Expansion Cards, Storage Devices, and Power Supplies
Chapter 4: Peripherals, Cables, and Connectors
Chapter 5: Laptop and Mobile Device Hardware
Chapter 6: Printers and Multifunction Devices
Chapter 7: Networking Fundamentals
Chapter 8: Introduction to TCP/IP
Chapter 9: Network Services
Chapter 10: Wireless and SOHO Networking
Chapter 11: Mobile Connectivity and Application Support
Chapter 12: Virtualization and Cloud Computing
Chapter 13: Core Hardware and Network Troubleshooting
Chapter 14: Mobile Device, Display, and Printer Troubleshooting
Chapter 15: Introduction Volume 2: Core 2 Exam 220-1202
Chapter 16: Operating System Basics
Chapter 17: Windows Configuration
Chapter 18: Windows Administration
Chapter 19: Working with macOS and Linux

Chapter 20: Security Concepts

Chapter 21: Securing Operating Systems

Chapter 22: Troubleshooting Operating Systems and Security

Chapter 23: Scripting, Remote Access, and Artificial Intelligence

Chapter 24: Safety and Environmental Concerns

Chapter 25: Documentation and Professionalism

Videos and How To

8. Practice Test

Here's what you get

Features

9. Live labs

Lab Tasks

Here's what you get

10. Post-Assessment

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.



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

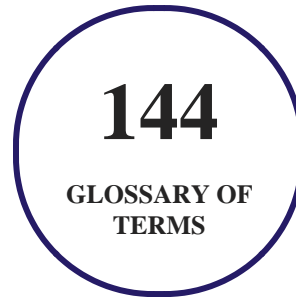
4. flashcards

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.

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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.



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 Volume 1: Core 1 Exam 220-1201

- What Is CompTIA A+ Certification?
- What Does This Course Cover?
- The CompTIA A+ Exam Objectives for Core 1 220-1201

Chapter 2: Motherboards, Processors, and Memory

- Understanding Motherboards
- Understanding Processors
- Understanding Memory
- Understanding Cooling Systems
- Summary
- Exam Essentials

Chapter 3: Expansion Cards, Storage Devices, and Power Supplies

- Installing and Configuring Expansion Cards
- Understanding Storage Devices
- Understanding Power Supplies

- Summary

- Exam Essentials

Chapter 4: Peripherals, Cables, and Connectors

- Understanding Peripheral Devices
- Understanding Cables and Connectors
- Summary
- Exam Essentials

Chapter 5: Laptop and Mobile Device Hardware

- Working with Laptop and Mobile Device Hardware
- Summary
- Exam Essentials

Chapter 6: Printers and Multifunction Devices

- Understanding Print Technologies and Imaging Processes
- Installing and Maintaining Printers
- Summary
- Exam Essentials

Chapter 7: Networking Fundamentals

- Understanding Networking Principles
- Identifying Common Network Hardware
- Summary
- Exam Essentials

Chapter 8: Introduction to TCP/IP

- Understanding TCP/IP
- Understanding Virtual Networks
- Summary
- Exam Essentials

Chapter 9: Network Services

- Understanding Network Services
- Summary
- Exam Essentials

Chapter 10: Wireless and SOHO Networking

- Understanding Wireless Networking Technologies
- Installing and Configuring SOHO Networks
- Summary
- Exam Essentials

Chapter 11: Mobile Connectivity and Application Support

- Understanding Mobile Connectivity
- Understanding Mobile App Support
- Summary
- Exam Essentials

Chapter 12: Virtualization and Cloud Computing

- Understanding Virtualization
- Understanding Cloud Computing
- Summary
- Exam Essentials

Chapter 13: Core Hardware and Network Troubleshooting

- Understanding Troubleshooting Best Practices

- Troubleshooting Motherboards, RAM, CPUs, and Power Problems
- Troubleshooting Drives and RAID Arrays
- Troubleshooting Networking Problems
- Summary
- Exam Essentials

Chapter 14: Mobile Device, Display, and Printer Troubleshooting

- Troubleshooting Video, Projector, and Display Issues
- Troubleshooting Common Mobile Device Issues
- Troubleshooting Printer Issues
- Summary
- Exam Essentials

Chapter 15: Introduction Volume 2: Core 2 Exam 220-1202

- What Does This Course Cover for Core 2 Exam 220-1202?
- The CompTIA A+ Exam Objectives Core 2 Exam 220-1202

Chapter 16: Operating System Basics

- Understanding Operating Systems

- Understanding Applications
- Introduction to Windows
- Preparing for the Exam
- Summary
- Exam Essentials

Chapter 17: Windows Configuration

- Interacting with Operating Systems
- The Windows Registry
- Disk Management
- Summary
- Exam Essentials

Chapter 18: Windows Administration

- Installing and Upgrading Windows
- Command-Line Tools
- Networking in Windows
- Summary
- Exam Essentials

Chapter 19: Working with macOS and Linux

- macOS and Linux
- Applications on macOS
- macOS Components
- macOS System Folders
- Best Practices
- Linux Administration
- Summary
- Exam Essentials

Chapter 20: Security Concepts

- Physical Security Concepts
- Physical Security for Staff
- Logical Security
- Malware
- Mitigating Software Threats
- Social Engineering Attacks, Threats, and Vulnerabilities

- Common Security Threats
- Exploits and Vulnerabilities
- Security Best Practices
- Destruction and Disposal Methods
- Summary
- Exam Essentials

Chapter 21: Securing Operating Systems

- Working with Windows OS Security Settings
- Web Browser Security
- Securing a SOHO Network (Wireless)
- Securing a SOHO Network (Wired)
- Mobile Device Security
- Summary
- Exam Essentials

Chapter 22: Troubleshooting Operating Systems and Security

- Troubleshooting Common Microsoft Windows OS Problems
- Troubleshooting Security Issues

- Best Practices for Malware Removal
- Troubleshooting Mobile OS Issues
- Troubleshooting Mobile Security Issues
- Summary
- Exam Essentials

Chapter 23: Scripting, Remote Access, and Artificial Intelligence

- Scripting
- Remote Access
- Artificial Intelligence
- Summary
- Exam Essentials

Chapter 24: Safety and Environmental Concerns

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

- Exam Essentials

Chapter 25: Documentation and Professionalism

- Documentation and Support
- Change Management Best Practices
- Backup and Recovery
- Demonstrating Professionalism
- 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.

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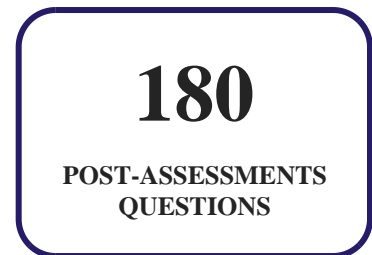
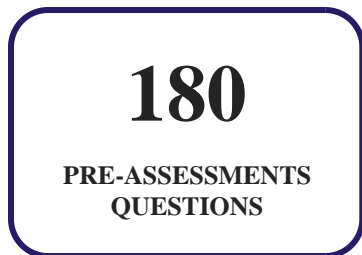
VIDEOS

03:30

HOURS

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

Motherboards, Processors, and Memory

- Replacing the RAM in a Laptop
- Connecting Internal Components of a Desktop

Expansion Cards, Storage Devices, and Power Supplies

- Installing the Sound Card
- Creating RAID Arrays
- Installing an SD Card
- Inserting and Ejecting a USB Drive
- Connecting an External Hard Disk
- Replacing the Internal HDD
- Protecting the Computer Using a UPS
- Replacing SMPS

Peripherals, Cables, and Connectors

- Adjusting Display Settings
- Connecting a Desktop
- Connecting a Wireless Mouse and Keyboard
- Connecting an External Speaker and Headphones

Laptop and Mobile Device Hardware

- Replacing the SSD in a Laptop
- Connecting a Docking Station

Printers and Multifunction Devices

- Enabling and Disabling a Device Driver
- Sharing a Printer
- Installing a Printer
- Setting up a Wireless Inkjet Printer

Networking Fundamentals

- Creating a Bus Topology
- Connecting to a DSL Network
- Connecting to a Cable Modem
- Connecting to an Ethernet Network

Introduction to TCP/IP

- Configuring an IPv4 Address
- Configuring an IPv6 Address
- Configuring a DNS Server
- Configuring a DHCP Server
- Configuring NAT
- Exploring APIPA and Loopback Addresses
- Configuring an SSH Server
- Capturing Packets Using Wireshark
- Creating a VLAN
- Adding a VPN Network

Network Services

- Casting an Android Device to a Television

Wireless and SOHO Networking

- Implementing a SOHO Network
- Configuring a Router
- Creating a Home Wireless Network

- Configuring a Router Manually
- Changing the Password for the Router
- Configuring the SSID

Mobile Connectivity and Application Support

- Connecting an iPhone to a Laptop via Bluetooth
- Connecting a Laptop to a Personal Mobile Hotspot
- Setting a Data-Usage Limit
- Connecting an iPhone to Wi-Fi
- Installing an App and Configuring Permission Settings
- Configuring Email and Synchronization on Mobile Devices

Virtualization and Cloud Computing

- Joining a Workstation to an AD Domain
- Creating a VM in Azure
- Setting Up Azure Storage and Uploading a File
- Creating an Azure IoT Hub
- Creating and Deploying a Web App

Core Hardware and Network Troubleshooting

- Troubleshooting Memory Issue of a Desktop
- Troubleshooting the Slow Performance Issue
- Troubleshooting IP Addressing Issues

Mobile Device, Display, and Printer Troubleshooting

- Replacing a Laptop Battery

Operating System Basics

- Installing and Uninstalling an Application in Windows
- Installing an Application Based on System Requirements in Windows
- Using Microsoft Office 365 Tools

Windows Configuration

- Performing Disk Cleanup
- Configuring Display Language, Region, and Keyboard Layout
- Personalizing Windows
- Configuring and Using File History
- Creating and Scheduling a Backup in Windows
- Observing Control Panel Options from Different Views
- Using Task Scheduler
- Adding an MMC Snap-in
- Disabling a Service
- Creating a Power Plan
- Monitoring System Performance Using Resource Monitor
- Using Performance Monitor
- Using Task Manager for Performance Analysis
- Viewing Logs in Windows Event Viewer
- Configuring Windows Defender Firewall
- Configuring Virtual Memory
- Exploring Windows Registry
- Creating a Volume with Disk Management
- Creating and Managing Dynamic Disks
- Converting a Basic Disk to a Dynamic Disk
- Creating a VHD
- Creating a Storage Pool
- Creating a Swap Partition
- Converting a FAT32 Partition to NTFS
- Mounting a Drive to a Folder

Windows Administration

- Configuring Windows Update
- Diagnosing Network Issues Using Command-Line Utilities
- Using System Commands
- Creating a Volume with Diskpart

- Setting Up and Using Network File Sharing
- Mapping a Network Drive
- Configuring Advanced Network Adapter Settings
- Configuring NIC Teaming
- Configuring Firewall Rules and Monitoring Network Logs Using pfSense

Working with macOS and Linux

- Using the ipconfig and ifconfig Commands
- Implementing Malware Protection on Linux
- Creating Backups in Linux
- Manipulating Files Using Command-Line Utilities
- Managing Files and Directories
- Encrypting and Decrypting a File Using OpenSSL
- Using the SET Tool
- Managing Linux Processes
- Viewing Network Details Using Linux Commands
- Managing Linux Passwords
- Archiving and Compressing Files in Linux
- Searching for Files and Text in Linux
- Creating an Extended and Logical Partition
- Managing Linux File Permissions and Editing Text Files
- Implementing PGP for Secure Email and File Encryption
- Performing Symmetric and Asymmetric Encryption

Security Concepts

- Implementing Physical Security
- Configuring Port Security on an Access Port
- Implementing MFA on Mobile Devices
- Configuring Group Policy Management
- Creating an OU
- Configuring Folder Redirection in Windows
- Enforcing Password Settings
- Simulating a DoS Attack

- Simulating a DDoS Attack
- Defending Against IP Spoofing
- Formatting and Cleaning a Disk

Securing Operating Systems

- Using BitLocker to Encrypt a Drive
- Encrypting a File Using EFS
- Compressing and Extracting Files Using 7-Zip
- Configuring UAC Settings
- Configuring and Managing User Permissions in Windows
- Setting Up a User Account
- Managing Users and Groups in Windows
- Managing File Attributes and Permissions
- Sharing a Folder with a Specific User and Group
- Configuring NTFS Permissions
- Configuring a Windows Firewall
- Detecting Threats Using Windows Defender
- Securing the Browser
- Configuring Proxy Settings
- Examining Kerberos Settings
- Setting Up Mobile Device Encryption and Backup on an iPad
- Configuring iPad Access Control and Authentication
- Setting a Secure Passcode on iPhone
- Updating iPhone iOS and Security Patches

Troubleshooting Operating Systems and Security

- Creating a Restore Point
- Jailbreaking an iPhone
- Performing a Factory Reset on an Android Phone

Scripting, Remote Access, and Artificial Intelligence

- Creating and Executing a PowerShell Script
- Creating and Executing a Python Script

- Creating and Executing a Shell Script
- Using the Remote Desktop Service

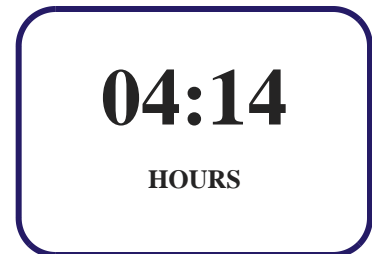
Safety and Environmental Concerns

- Completing the Chain of Custody Form

Documentation and Professionalism

- Reporting an Issue
- Enabling the Shadow Copies Feature
- Configuring an IP Address in Linux

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.

You can't stay away! Get