

# uCertify

## Course Outline

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**CompTIA Computer Software  
Technician (A+ 220-1002)**



Lesson



Practice test



Live-Lab

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## 1. Course Objective

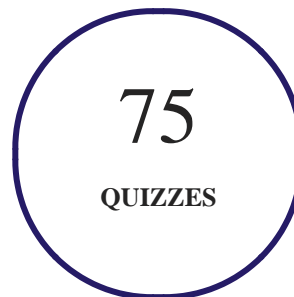
Kick start your prep for the 220-1002 exam in your first attempt with the CompTIA Computer Software Technician (A+ 220-1002) course and lab. The lab is cloud-based, device-enabled, and can easily be integrated with an LMS. The CompTIA A+ study guide comprehensively covers the 220-1002 exam objectives and helps you understand expanded security, software troubleshooting, and operational procedures; and how to install and configure operating systems with its various learning resources.

## 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.

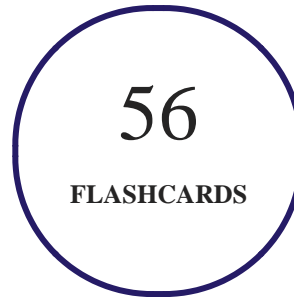
## 3. Quizzes

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.



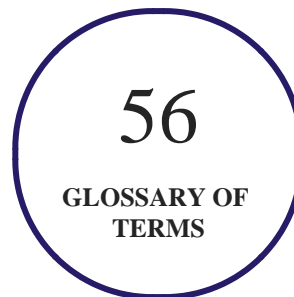
## 4. Flashcards

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: Operating systems

- Module A: Windows versions and features
  
- Module B: Non-Windows operating systems
  
- Module C: Operating system installation and upgrades



- Module D: Applications and scripting
- Summary

## Chapter 2: Windows management

- Module A: Operating system features and tools
- Module B: Control Panel utilities
- Module C: Command-line tools
- Module D: Operating system troubleshooting
- Summary

## Chapter 3: Windows networking

- Module A: Network shares
- Module B: Network connections
- Module C: Connection troubleshooting
- Summary

## Chapter 4: Security principles

- Module A: Threats and vulnerabilities

- Module B: Security controls
- Summary

## Chapter 5: Security technologies

- Module A: Operating system security
- Module B: Security hardware and software
- Summary

## Chapter 6: Securing devices and data

- Module A: Workstation security
- Module B: Mobile device security
- Module C: Network security
- Module D: Security troubleshooting
- Summary

## Chapter 7: Operational procedures

- Module A: IT operations
- Module B: Incident response

- Module C: Backup and recovery
- Summary

## Chapter 8: Safety and professionalism

- Module A: Safety
- Module B: Environmental factors
- Module C: Professionalism
- Summary

## Chapter 9: Appendix A

### 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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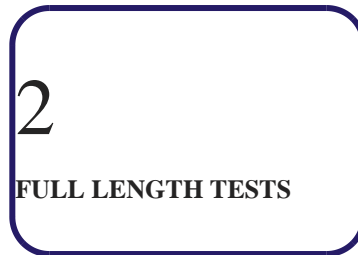
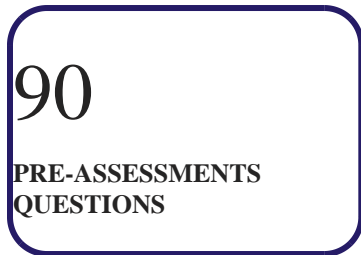
VIDEOS

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HOURS

## 11. Practice Test

## Here's what you get



## 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. Live Labs

Live-Lab is a real computer equipment, networked together and conveniently accessible over the internet using virtualization. A live-lab has equipments such as a computer, server, switch or router in it that a user is free to configure.

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 systems

- Creating and Running a ps1 File
- 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
- Using Basic Linux Commands

- Listing Files in a Directory
- Verifying the Working Directory
- Working with Directories
- Performing a Text Search
- Managing NTFS Permissions
- Converting a FAT32 Partition to NTFS
- Disabling a Service

### **Windows management**

- 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
- Entering Commands at the Command-line

### **Windows networking**

- 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
- Using the nbtstat command
- Using the netstat Command
- Using the nslookup Command
- Using the ping Command
- Tracing Route Using Tracert

### **Security principles**

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

### **Security technologies**

- Stopping Permissions Inheritance
- Propagating Permissions
- Removing a Credential
- Configuring an Audit Group Policy
- Configuring an Account Password Policy

### **Securing devices and data**

- Disabling AutoPlay
- Configuring Screensavers
- Securing User Accounts
- Creating a New User
- Using BitLocker
- Locking an iPhone with a Password
- Using Windows Security

### Operational procedures

- Backing up Files
- Restoring Files

### Safety and professionalism

- 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




## 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.

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