CompTIA A+ Certification (Exams 220-1001 and 220-1002)

Overview

CompTIA A+ certified professionals are proven problem solvers. They support today's core technologies from security to cloud to data management and more. CompTIA A+ is the industry standard for launching IT careers into today's digital world. It is the only industry recognized credential with performance-based items to prove pros can think on their feet to perform critical IT support tasks in the moment. It is trusted by employers around the world to identify the go-to person in end point management and technical support roles. CompTIA A+ is regularly re-invented by IT experts to ensure that it validates core skills and abilities demanded in the workplace. The Official CompTIA® A+® Core 1 and Core 2 (Exams 220-1001 and 220-1002) course provides the background knowledge and skills you will require to be a successful A+ technician. It will help you prepare to take the CompTIA A+ Core Series certification examinations (exam numbers 220-1001 and 220-1002), in order to become a CompTIA A+ Certified Professional.

Prerequisite Comments

To ensure your success in this course, you should have basic computer user skills, be able to complete tasks in a Microsoft® Windows® environment, be able to search for, browse, and access information on the Internet, and have basic knowledge of computing concepts.

Target Audience

This course is designed for individuals who have basic computer user skills and who are interested in obtaining a job as an entry-level IT technician. This course is also designed for students who are seeking the CompTIA A+ certification and who want to prepare for the CompTIA A+ Core 1 220-1001 Certification Exam and the CompTIA A+ Core 2 220-1002 Certification Exam.

Course Objectives

In this course, you will install, configure, optimize, troubleshoot, repair, upgrade, and perform preventive maintenance on personal computers, digital devices, and operating systems.
You will:
Support operating systems.
Install and configure PC system unit components and peripheral devices.
Install, configure, and troubleshoot display and multimedia devices.
Install, configure, and troubleshoot storage devices.
Install, configure, and troubleshoot internal system components.
Install, configure, and maintain operating systems.
Maintain and troubleshoot Microsoft Windows.
Explain network infrastructure concepts.
Configure and troubleshoot network connections.
Manage users, workstations, and shared resources.
Implement client virtualization and cloud computing.
Implement physical security.
Secure workstations and data.
Troubleshoot workstation security issues.
Support and troubleshoot laptops.
Support and troubleshoot mobile devices.
Install, configure, and troubleshoot print devices.
Implement operational procedures.

Course Outline

1 - Supporting Operating Systems

Identify Common Operating Systems
Troubleshooting Methodology
Use Windows Features and Tools
Manage Files in Windows
Manage Disks in Windows
Manage Devices in Windows

2 - Installing and Configuring PC Components

Use Appropriate Safety Procedures
PC Components
Common Connection Interfaces
Install Peripheral Devices

3 - Installing, Configuring, and Troubleshooting Display and Multimedia Devices

Install and Configure Display Devices
Troubleshoot Display Devices
Install and Configure Multimedia Devices

4 - Installing, Configuring, and Troubleshooting Storage Devices

Install System Memory
Install and Configure Mass Storage Devices
Install and Configure Removable Storage
Configure RAID
Troubleshoot Storage Devices

5 - Installing, Configuring, and Troubleshooting Internal System Components

Install and Upgrade CPUs
Configure and Update BIOS/UEFI
Install Power Supplies
Troubleshoot Internal System Components
Configure a Custom PC

6 - Installing, Configuring, and Maintaining Operating Systems

Configure and Use Linux
Configure and Use macOS
Install and Upgrade Operating Systems
Maintain OSs

7 - Maintaining and Troubleshooting Microsoft Windows

Install and Manage Windows Applications
Manage Windows Performance
Troubleshoot Windows

8 - Network Infrastructure Concepts

Wired Networks
Network Hardware Devices
Wireless Networks
Internet Connection Types
Network Configuration Concepts
Network Services

9 - Configuring and Troubleshooting Networks

Configure Network Connection Settings
Install and Configure SOHO Networks
Configure SOHO Network Security
Configure Remote Access
Troubleshoot Network Connections
Install and Configure IoT Devices

10 - Managing Users, Workstations, and Shared Resources

Manage Users
Configure Shared Resources
Configure Active Directory Accounts and Policies

11 - Implementing Client Virtualization and Cloud Computing

Configure Client-Side Virtualization
Cloud Computing Concepts

12 - Security Concepts

Logical Security Concepts
Threats and Vulnerabilities
Physical Security Measures

13 - Securing Workstations and Data

Implement Security Best Practices
Implement Data Protection Policies
Protect Data During Incident Response

14 - Troubleshooting Workstation Security Issues

Detect, Remove, and Prevent Malware
Troubleshoot Common Workstation Security Issues

15 - Supporting and Troubleshooting Laptops

Use Laptop Features
Install and Configure Laptop Hardware
Troubleshoot Common Laptop Issues

16 - Supporting and Troubleshooting Mobile Devices

Mobile Device Types
Connect and Configure Mobile Device Accessories
Configure Mobile Device Network Connectivity
Support Mobile Apps
Secure Mobile Devices
Troubleshoot Mobile Device Issues

17 - Installing, Configuring, and Troubleshooting Print Devices

Maintain Laser Printers
Maintain Inkjet Printers
Maintain Impact, Thermal, and 3D Printers
Install and Configure Printers
Troubleshoot Print Device Issues
Install and Configure Imaging Devices

18 - Implementing Operational Procedures

Environmental Impacts and Controls
Create and Maintain Documentation
Use Basic Change Management Best Practices
Implement Disaster Prevention and Recovery Methods
Basic Scripting Concepts
Professionalism and Communication