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.

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 - Installing and Configuring PC Components

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

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

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

3 - 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

4 - 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

5 - 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

6 - Network Infrastructure Concepts

Wired Networks
Network Hardware Devices
Wireless Networks
Internet Connection Types
Network Configuration Concepts
Network Services
7 - 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

8 - Supporting and Troubleshooting Laptops

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

9 - 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

10 - Implementing Client Virtualization and Cloud Computing

- Configure Client-Side Virtualization
- Cloud Computing Concepts

11 - 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

12 - Maintaining and Troubleshooting Microsoft Windows

- Install and Manage Windows Applications
- Manage Windows Performance
- Troubleshoot Windows
13 - Installing, Configuring, and Maintaining Operating Systems

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

14 - Managing Users, Workstations, and Shared Resources

Manage Users
Configure Shared Resources
Configure Active Directory Accounts and Policies

15 - Security Concepts

Logical Security Concepts
Threats and Vulnerabilities
Physical Security Measures

16 - Securing Workstations and Data

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

17 - Troubleshooting Workstation Security Issues

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

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