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

Course 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.

Who Should Attend
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