CompTIA A+ 2019 (Core Series)

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Course Length: 6 days (virtual)

Course Description:
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 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, in order to become a CompTIA A+ Certified Professional.

Course Objectives:
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.

Target Student:
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.

Prerequisites:
To ensure your success in this course, you should have experience with 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.
Course Content

Lesson 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

Lesson 2: Installing and Configuring PC Components
- Use Appropriate Safety Procedures
- PC Components
- Common Connection Interfaces
- Install Peripheral Devices

Lesson 3: Installing, Configuring, and Troubleshooting Display and Multimedia Devices
- Install and Configure Display Devices
- Troubleshoot Display Devices
- Install and Configure Multimedia Devices

Lesson 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

Lesson 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

Lesson 6: Installing, Configuring, and Maintaining Operating Systems
- Configure and Use Linux
- Configure and Use macOS
- Install and Upgrade Operating Systems
- Maintain OSs

Lesson 7: Maintaining and Troubleshooting Microsoft Windows
- Install and Manage Windows Applications
- Manage Windows Performance
- Troubleshoot Windows

Lesson 8: Network Infrastructure Concepts
- Wired Networks
- Network Hardware Devices
- Wireless Networks
- Internet Connection Types
- Network Configuration Concepts
- Network Services

Lesson 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

Lesson 10: Managing Users, Workstations, and Shared Resources
• Manage Users
• Configure Shared Resources
• Configure Active Directory Accounts and Policies

Lesson 11: Implementing Client Virtualization and Cloud Computing
• Configure Client-Side Virtualization
• Cloud Computing Concepts

Lesson 12: Security Concepts
• Logical Security Concepts
• Threats and Vulnerabilities
• Physical Security Measures

Lesson 13: Securing Workstations and Data
• Implement Security Best Practices
• Implement Data Protection Policies
• Protect Data During Incident Response

Lesson 14: Troubleshooting Workstation Security Issues
• Detect, Remove, and Prevent Malware
• Troubleshoot Common Workstation Security Issues

Lesson 15: Supporting and Troubleshooting Laptops
• Use Laptop Features
• Install and Configure Laptop Hardware
• Troubleshoot Common Laptop Issues

Lesson 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

Lesson 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

Lesson 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