
COMPTIA A PLUS (220-1001 AND 220-1002)

Who Should Attend

CompTIA A+ is the industry standard for establishing a career in today's digital world. A+ is the preferred qualifying credential for technical support and IT operational roles. If you are getting ready for a career as an entry-level information technology (IT) professional or computer service technician, the CompTIA® A+® course is the first step in your preparation.

The CompTIA A+ Core 1 and Core 2 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 exams.

Jobs that use A+ include: Support Specialist, Field Service Technician, Help Desk Tier 2 Support, and Desktop Support Analyst.

Course Objectives

In this course, you will learn to install, configure, optimize, troubleshoot, repair, upgrade, and perform preventive maintenance on personal computers, digital devices, and operating systems.

Upon successful completion of this course, students will be able to:

- Support Operating Systems.
- Install and Configure PC System Unit Components and Peripheral Devices.
- Install, Configure, and Troubleshoot Storage Devices.
- Install, Configure and Troubleshoot Display and Multimedia 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.

The CompTIA A+ 220-1001 exam covers Mobile Devices, Networking, Hardware, Virtualization and Cloud Computing and Hardware and Network Troubleshooting.

The CompTIA A+ 220-1002 exam covers Operating Systems, Security, Software Troubleshooting, and Operational Procedures.

Course Outline

Objective 1.0 Supporting Operating Systems

- 1.1 Identifying Common Operating Systems
- 1.2 Troubleshooting Methodology
- 1.3 Use Windows Features and Tools
- 1.4 Manage Files in Windows
- 1.5 Manage Disk in Windows
- 1.6 Manage Devices in Windows

Objective 2.0 Installing and Configuring PC Components

- 2.1 Use Appropriate Safety Procedures
- 2.2 PC Components
- 2.3 Common Connection Interfaces
- 2.4 Install Peripheral Devices

Objective 3.0 Installing, Configuring, and Troubleshooting Display and Multimedia Devices

- 3.1 Install and Configure Display Devices
- 3.2 Troubleshoot Display Devices
- 3.3 Install and Configure Multimedia Devices

Objective 4.0 Installing, Configuring, and Troubleshooting Storage Devices

- 4.1 Install System Memory
- 4.2 Install and Configure Mass Storage Devices
- 4.3 Install and Configure Removable Storage
- 4.4 Configure RAID
- 4.5 Troubleshoot Storage Devices

Objective 5.0 Installing, Configuring, and Troubleshooting Internal System Components

- 5.1 Install and Upgrade CPU's
- 5.2 Configure and Update BIOS/UEFI
- 5.3 Install Power Supplies
- 5.4 Troubleshoot Internal System Components
- 5.5 Configure a Custom PC

Objective 6.0 Installing, Configuring, and Maintaining Operating Systems

- 6.1 Configure and Use Linux
- 6.2 Configure and Use macOS
- 6.3 Install and Upgrade Operating Systems
- 6.4 Maintain OS's

Objective 7.0 Maintaining and Troubleshooting Microsoft Windows

- 7.1 Install and Manage Windows Applications
- 7.2 Manage Windows Performance
- 7.3 Troubleshoot Windows

Objective 8.0 Network Infrastructure Concepts

- 8.1 Wired Networks
- 8.2 Network Hardware Devices
- 8.3 Wireless Networks
- 8.4 Internet Connection Types
- 8.5 Network Configuration Concepts
- 8.6 Network Services

Objective 9.0 Configuring and Troubleshooting Networks

- 9.1 Configure Network Connection Settings
- 9.2 Install and Configure SOHO Networks
- 9.3 Configure SOHO Network Security
- 9.4 Configure Remote Access
- 9.5 Troubleshoot Network Connections
- 9.6 Install and Configure IoT Devices

Objective 10.0 Managing Users, Workstations, and Shared Resources

- 10.1 Manage Users
- 10.2 Configure Shared Resources
- 10.3 Configure Active Directory Accounts and Policies

Objective 11.0 Implementing Client Virtualization and Cloud Computing

- 11.1 Configure Client-Side Virtualization
- 11.2 Cloud Computing Concepts

Objective 12.0 Security Concepts

- 12.1 Logical Security Concepts
- 12.2 Threats and Vulnerabilities

12.3 Physical Security Measures

Objective 13.0 Securing Workstations and Data

- 13.1 Implementing Security Best Practices
- 13.2 Implementing Data Protection Policies
- 13.3 Protect Data During Incident Response

Objective 14.0 Troubleshooting Workstation Security Issues

- 14.1 Detect, Remove, and Prevent Malware
- 14.2 Troubleshoot Common Workstation Security Issues

Objective 15.0 Supporting and Troubleshooting Laptops

- 15.1 Use Laptop Features
- 15.2 Install and Configure Laptop Hardware
- 15.3 Troubleshoot Common Laptop Issues

Objective 16.0 Supporting and Troubleshooting Mobile Devices

- 16.1 Mobile Device Types
- 16.2 Connect and Configure Mobile Device Accessories
- 16.3 Configure Mobile Device Network Connectivity
- 16.4 Support Mobile Apps
- 16.5 Secure Mobile Devices
- 16.6 Troubleshoot Mobile Device Issues

Objective 17.0 Installing, Configuring, and Troubleshooting Print Devices

- 17.1 Maintain Laser Printers
- 17.2 Maintain Inkjet Printers
- 17.3 Maintain Impact, Thermal and 3D Printers
- 17.5 Install and Configure Printers
- 17.6 Troubleshoot Print Device Issues
- 17.7 Install and Configure Imaging Devices

Objective 18.0 Implementing Operational Procedures

- 18.1 Environmental Impacts and Controls
- 18.2 Create and Maintain Documentation
- 18.3 Use Basic Change Management Best Practices
- 18.4 Implement Disaster Prevention and Recovery Materials
- 18.5 Basic Scripting Concepts
- 18.6 Professionalism and Communication