CompTIA A+ Certification (Exams 220-901 & 220-902)

Modality: On Demand

Duration: 26 Hours

About this course:

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 course will build on your existing user-level knowledge and experience with personal computer (PC) software and hardware to present fundamental skills and concepts that you will use on the job.

The CompTIA A+ course can benefit you in two ways. Whether you work or plan to work in a mobile or corporate environment where you have a high level of face-to-face customer interaction, where client communication and client training are important, or in an environment with limited customer interaction and an emphasis on hardware activities, this course provides the background knowledge and skills you will require to be a successful A+ technician. It can also assist you if you are preparing to take the CompTIA A+ certification examinations, objectives (exam numbers 220-901 and 220-902), in order to become a CompTIA A+ Certified Professional.

The average salary for a Service Technician A+ Certified is **$42,190** per year.

Course Objective:

After completing this course, students will be able to:

- Identify the hardware components of personal computers and mobile digital devices.
- Identify the basic components and functions of operating systems.
- Identify networking and security fundamentals.
- Identify the operational procedures that should be followed by professional PC technicians.
- Install, configure, and troubleshoot display devices.
- Install and configure peripheral components.
- Manage system components.
- Manage data storage.
- Install and configure Microsoft Windows.
- Optimize and maintain Microsoft Windows.
- Work with other operating systems.
- Identify the hardware and software requirements for client environment configurations.
- Identify network technologies.
- Install and configure networking capabilities.
- Support mobile digital devices.
- Support printers and multifunction devices.
- Identify security threats, vulnerabilities, and controls.
- Implement security controls.
- Troubleshoot system-wide issues.
- Expanded coverage of mobile devices and operating systems

- Fundamental cloud concepts
- More security problem solving
- Signi?cant increase in troubleshooting

Audience:

This course is intended 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+ 220-901 Certification Exam and the CompTIA 220-902 Certification Exam.

Prerequisites:

- 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.

Suggested prerequisites courses:

- [Deploying and Managing Windows 10 Using Enterprise Services (MS-20697-2)](https://www.quickstart.com/)

Course Outline:

- **Course Introduction**
- Module 01 - Configuring BIOS
- Module 02 - Motherboards
- Module 03 - Expansion Slots
- Module 04 - RAM Types and Features
- Module 05 - Install and Configure PC Expansion Cards
- Module 06 - Install and Configure Storage Devices
- Module 07 - CPU's and Cooling Methods
- Module 08 - PC Connection Interfaces
- Module 09 - Power Supplies
- Module 10 - Custom Computer Specifications
- Module 11 - Installing Displays
- Module 12 - PC Connectors
- Module 13 - Installing Peripheral
- Module 14 - Installing Multifunction Devices and SOHO Networks
- Module 15 - Printer Technologies
- Module 16 - Printer Maintenance
- Module 17 - Networking
- Module 18 - Properties and Characteristics of TCP/IP
- Module 19 - TCP vs. UDP
- Module 20 - Wi-Fi Networking Standards and Encryption Types
- Module 21 - Install and Configure SOHO Wireless/Wired Router

- Module 22 - Architecture and Internet Connection Types
- Module 23 - Networking Tools
- Module 24 - Laptop Hardware Components
- Module 25 - Mobile Devices
- Module 26 - Mobile Device Ports and Accessories
- Module 27 - Troubleshooting Theory
- Module 28 - Troubleshooting RAID Arrays and Hard Drives
- Module 29 - Troubleshooting Video
- Module 30 - Troubleshooting Network Issues
- Module 31 - Troubleshooting Printers
- Module 32 - Windows Operating Systems
- Module 33 - Command Line Tools
- Module 34 - Microsoft Operating System Features and Tools
- Module 35 - Control Panel Utilities
- Module 36 - Windows Networking on Client Desktops
- Module 37 - Preventative Maintenance
- Module 38 - Features and Functionality of the Mac OS and Linux Operating Systems
- Module 39 - Client Side Virtualization
- Module 40 - Cloud-based Concepts
- Module 41 - Network Host Properties
- Module 42 - Mobile Operating Systems
- Module 43 - Mobile Device Network and E-mail
- Module 44 - Security
- Module 45 - Prevention Methods
- Module 46 - Windows Security Settings
- Module 47 - Security Best Practices
- Module 48 - Securing Mobile Devices
- Module 49 - Troubleshooting Common PC Tools
- Module 50 - Common PC Security Issues
- Module 51 - Common Mobile Operating Systems Troubleshooting
- Module 52 - Common Safety Practices
- Module 53 - Maintenance Tools and Techniques
- Module 54 - Privacy and Licensing Concepts
- Course Conclusion