



Course duration	40 hours
Class duration	8 hours
Delivery mode	Face to Face / Live Online
Exam code	CompTIA A+ Core Series (220-1101 and 220-1102)
Targeted Audience	If you are getting ready for a career as an entry-level information technology (IT) professional or personal computer (PC) service technician, the CompTIA® A+® Certification course is the first step in your preparation
Prerequisites	Students taking this course should have the following skills: end-user skills with Windows®-based personal computers, including the ability to: browse and search for information on the Internet; start up, shut down, and log on to a computer and network; run programs; and move, copy, delete, and rename files in Windows Explorer. Students should also have basic knowledge of computing concepts, including the difference between hardware and software; the functions of software components, such as the operating system, applications, and file systems; and the function of a computer network.

Main Topic	Sub-Topic	Duration (hrs)
Mobile Devices	Install and configure laptop hardware and components	5
	Install components within the display of a laptop	
	Use appropriate laptop features	
	Compare and contrast characteristics of various types of other mobile devices	
	Connect and configure accessories and ports of other mobile devices	
	Configure basic mobile device network connectivity and application support	
	Use methods to perform mobile device synchronization	
Networking	Compare and contrast TCP and UDP ports, protocols, and their purposes	5
	Compare and contrast common networking hardware devices	
	Install and configure a basic wired/wireless SOHO network	
	Compare and contrast wireless networking protocols	
	Summarize the properties and purposes of services provided by networking hosts	
	Explain common network configuration concepts	
	Compare and contrast Internet connection types, network types, and their features	
	Use appropriate networking tools	
Hardware	Explain basic cable types, features, and their purposes	6
	Identify common connector types	
	Install RAM types	
	Select, install and configure storage devices	
	Install and configure motherboards, CPUs, and add-on cards	
	Explain the purposes and uses of various peripheral types	
	Summarize power types and features	
	Select and configure appropriate components for a custom PC configuration to meet customer specifications or needs	
	Install and configure common devices	

	Configure SOHO multifunction devices/printers and settings	
	Install and maintain various print technologies	
Virtualization and Cloud Computing	Compare and contrast cloud computing concepts	2
	Set up and configure client-side virtualization	
Hardware and Network Troubleshooting	Use the best practice methodology to resolve problems	4
	Troubleshoot problems related to motherboards, RAM, CPUs, and power	
	Troubleshoot hard drives and RAID arrays	
	Troubleshoot video, projector, and display issues	
	Troubleshoot common mobile device issues while adhering to the appropriate procedures	
	Troubleshoot printers	
	Troubleshoot common wired and wireless network problems	
<b>CompTIA A+ / Exam Core 2 (220-1002)</b>		
Operating Systems	Compare and contrast common operating system types and their purposes	5
	Compare and contrast features of Microsoft Windows versions	
	Summarize general OS installation, considerations and upgrade methods	
	Use appropriate Microsoft command line tools	
	Use Microsoft operating system features and tools	
	Use Microsoft Windows Control Panel utilities	
	Summarize application, installation and configuration concepts	
	Configure Microsoft Windows networking on a client/desktop	
Security	Use features and tools of the Mac OS and Linux client/desktop operating systems	6
	Summarize the importance of physical security measures	
	Explain logical security concepts	
	Compare and contrast wireless security protocols and authentication methods	
	Detect, remove, and prevent malware using appropriate tools and methods	
	Compare and contrast social engineering, threats, and vulnerabilities	
	Compare and contrast the differences of basic Microsoft Windows OS security settings	
	Implement security best practices to secure a workstation	
	Implement methods for securing mobile devices	
	Implement appropriate data destruction and disposal methods	
Configure security on SOHO wireless and wired networks		
Software Troubleshooting	Troubleshoot Microsoft Windows OS problems	7
	Troubleshoot and resolve PC security issues	
	Use best practices procedures for malware removal	
	Troubleshoot mobile OS and application issues	
	Troubleshoot mobile OS and application security issues	

Operational Procedures	Compare and contrast best practices associated with types of documentation	
	Implement basic change management best practices	
	Implement basic disaster prevention and recovery methods	
	Explain common safety procedures	
	explain environmental impacts and appropriate controls	
	Explain the processes for addressing prohibited content/activity, and privacy, licensing, and policy concepts	
	Use proper communication techniques and professionalism	
	Identify the basics of scripting	
	Use remote access technologies	
<b>Total Course Duration (hrs)</b>		<b>40</b>


**HARDWARE**

Identifying, using, and connecting hardware components and devices, including the broad knowledge about different devices that is now necessary to support the remote workforce


**OPERATING SYSTEMS**

Install and support Windows OS including command line & client support. System configuration imaging and troubleshooting for Mac OS, Chrome OS, Android and Linux OS.


**SOFTWARE TROUBLESHOOTING**

Troubleshoot PC and mobile device issues including common OS, malware and security issues.


**NETWORKING**

Explain types of networks and connections including TCP/IP, WIFI and SOHO


**TROUBLESHOOTING**

Troubleshoot real-world device and network issues quickly and efficiently


**SECURITY**

Identify and protect against security vulnerabilities for devices and their network connections


**MOBILE DEVICES**

Install & configure laptops and other mobile devices and support applications to ensure connectivity for end- users


**VIRTUALIZATION & CLOUD COMPUTING**

Compare & contrast cloud computing concepts & set up client-side virtualization


**OPERATIONAL PROCEDURES**

Follow best practices for safety, environmental impacts, and communication and professionalism

