

Course ID

**A+602**

Course Duration

**3 days**

Course Title

## **CompTIA A+ Certification - 220-602: IT Technician Training**

### **Related Courses**

- CompTIA A+ Certification - 220-603: Remote Support Technician Training (A+603, 3 days)
- CompTIA A+ Certification - 220-604: Depot Technician Training (A+604, 3 days)
- CompTIA Network + Certification Training (NETWORK+, 5 days)
- Principles of Network Security: CompTIA Security+ and US DoD Directive 8570.1 (NETSEC, 3-4 days)

### **Aimed At**

Entry level I/T professionals, including enterprise technicians, desktop support technician, PC support specialist, IT administrators, field service technicians, and others who work or intend to work in a mobile or corporate environment with a high level of face-to-face client interaction.

### **Group Size**

5-15

### **Prerequisites**

- CompTIA A+ Certification: IT Essentials Training (A+ESSENT, 3 days )

General familiarity with personal computers is a must. Some I/T support work experience is also desirable.

### **Course in a Nutshell**

This course, designed to meet the requirements of the CompTIA A+ 220-602 examination, will ensure that you have the right skills for your work as an IT technician in a mobile or corporate environment. CompTIA A+ is an internationally recognized vendor-neutral certification for validating the skills needed by computer support personnel. It is recognized by major hardware and software vendors, distributors, and resellers.

In this course, you will acquire the knowledge and skills necessary to perform tasks such as PC building, installation, configuration, troubleshooting, preventive maintenance, optimization, and repair in the context of the field service or enterprise environment.

### **Customize It!**

Customize this course to your specific background and job requirements at little-to-no additional cost. We'll tailor the topics included in the course, the emphasis given to each topic, the pace of coverage, and the choice of hands-on exercises to suit your needs. If you have an interest in a particular area, let us know, so we can be sure to address it.

For those who need a boot camp in IT support basics, networking, and network security, a combined course that consists of pertinent material from our CompTIA A+, Network+, and Security+ course series is also available.

- Learn How To**
- Identify the basic components of a personal computer and select an appropriate troubleshooting methodology
  - Select an appropriate client operating system
  - Manage files and folders in Windows
  - Describe and troubleshoot computer power supplies
  - Identify and troubleshoot CPU and motherboards
  - Compare and troubleshoot computer memory
  - Install PCI and video buses
  - Install and troubleshoot expansion cards
  - Identify and troubleshoot ports, connectors and cables
  - Install, maintain and troubleshoot data storage devices
  - Install and troubleshoot video and multimedia devices
  - Install and troubleshoot printers
  - Identify, maintain, and troubleshoot portable computers and devices
  - Monitor and manage Windows client operating systems
  - Connect computers
  - Network computers
  - Secure computers and data
  - Employ safe work practices while working on personal computers
  - Troubleshoot and maintain personal computers
  - Employ professionalism and good communication while working on personal computers
  - Install and upgrade Windows client operating systems

**Course  
Outline**

- Electricity and Power Systems
  - Electricity and static electricity
  - Power supplies
  - Power conditioning and management
  - Power supply troubleshooting
- CPUs and Motherboards
  - CPU and motherboard installation
  - Motherboard troubleshooting
- Expansion Cards
  - Host system interaction
  - Expansion card installation
  - Laptop expansion device installation
  - Legacy device installation
  - Expansion card troubleshooting
- Data Storage Devices
  - Hard drives
  - Optical drives
  - Removable storage devices
  - Tape drives and backup systems
  - Storage device troubleshooting

- Ports, Connectors and Cables
  - Serial and parallel ports, cables and connectors
  - Keyboards and pointing devices
  - USB ports, cables and connectors
  - FireWire ports, cables and connectors
  - Infrared and Bluetooth wireless ports
  - Multimedia ports, cables and connectors
  - Port, cable and connector troubleshooting
- Printers and Scanners
  - Printing technologies
  - Printers
  - Scanners
- Display Devices
  - Monitors
  - Troubleshooting and maintaining display devices
- Portable Computers and Devices
  - Communication connections
  - Component replacement
  - Portable computer power sources
- Operating System management
  - Managing directories and files
  - System monitoring and management
  - Event viewer
  - The Registry
- Operating System Maintenance and Troubleshooting
  - Operating system maintenance
  - Operating system troubleshooting
- Networking
  - Networking configuration
  - Resource sharing
  - Internet connectivity
  - Network protection
  - Network troubleshooting
- Security
  - Operating system security
  - Auditing and logging
  - The human aspects of security
- Maintaining the PC Environment
  - Safety and hazards
  - Troubleshooting and maintaining PCs
- Professionalism and Communication
  - Professionalism

- Customer satisfaction
- Problem and resolution tracking

- Wrap-up: Course Recap, Q/A, and Evaluations

**How You Will Learn**

- An experienced I/T professional will teach this class in workshop (interactive lecture/lab) format.
- Hands-on exercises will help you understand each topic and make a bridge from theory to application.
- The instructor will offer real-life examples, applications, and case studies to enrich the class and drive home the essential points.
- You'll learn dos and don'ts, both the tricks of the trade as well as the hidden pitfalls.
- The participant handbooks will provide you with a structure to which you can add information and insight provided in real-time, turning it into a valuable reference resource you can take back to your job.

*Revised*

*Jan. 30, 2007*