CompTIA: A+ Certification Bootcamp-Accelerated Course

Course ID#: 1200-050-ZZ-W

Hours: 35

Course Content

Course Description:

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 Bootcamp-Accelerated Course is the first step in your preparation. The course will build on your existing user-level knowledge and experience with personal computer software and hardware to present fundamental skills and concepts that you will use on the job. In this course, you will acquire the essential skills and information you will need to install, upgrade, repair, configure, troubleshoot, optimize, and perform preventative maintenance of basic personal computer hardware and operating systems.

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 will prepare you for the CompTIA A+ certification examinations, 2012 objectives (exam numbers 220-801, 220-802), in order to become a CompTIA A+ Certified Professional.

Course Objectives:

In this course, you will install, upgrade, repair, configure, optimize, troubleshoot, and perform preventative maintenance on basic personal computer hardware and operating systems.

You will:
- Identify the hardware components of a computer.
- Identify the basic components and functions of an operating system.
- Identify the operational procedures that should be followed by PC technicians.
- Identify and configure peripheral components.
- Manage system components.
- Identify and configure operating systems.
- Identify the hardware and software requirements for custom client environments.
- Identify network technologies.
- Identify, configure, and maintain SOHO networks.
- Support laptops.
- Configure mobile computing devices.
- Support printers.
- Implement concepts and techniques used to secure computing devices and environments.
- Troubleshoot hardware components.
- Troubleshoot system-wide issues.

CompTIA: A+ Certification Bootcamp- Accelerated Course

Course ID#: 1200-050-ZZ-W

Hours: 35

Target Student:

This course is intended for anyone with basic computer user skills who is interested in obtaining a job as an IT professional or PC technician. In addition, this course will help prepare students to achieve a CompTIA A+ Certification.

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.

An introductory course in a Windows operating system, or equivalent skills and knowledge, is required. Students can take any one of the following Logical Operations courses: Introduction to Personal Computers: Using Windows® XP or Introduction to Personal Computers: Using Windows® 7.

The following Logical Operations courses are also recommended: Windows® XP: Introduction or Microsoft® Windows® 7: Level 1.

Topics:

Module 1: Hardware Fundamentals
- Computer System Components
- Storage Devices
- Device Connections and Interfaces

Module 2: Operating System Fundamentals
- Personal Computer Operating Systems
- Windows Control Panel Utilities
- Command Line Tools
- Windows Security Settings
- Windows Operating System Tools

Module 3: Operational Procedures
- Basic Maintenance Tools and Techniques
- Electrical Safety
- Environmental Safety and Materials Handling
- Professionalism and Communication

Module 4: Peripheral Components

- Install and Configure Display Devices
- Install and Configure Input Devices
- Install and Configure Expansion Cards
- Install and Configure Multimedia Devices

Module 5: Managing System Components
- Motherboards
- CPUs and Cooling Systems
- Select and Install Power Supplies
- RAM Types and Features
- Install and Configure Storage Devices
- Configure the System BIOS

CompTIA: A+ Certification Bootcamp- Accelerated Course

Course ID#: 1200-050-ZZ-W

Hours: 35

Module 6: Installing and Configuring Operating Systems
- Implement Virtualization
- Install Microsoft Windows
- Windows Upgrades
- Windows Optimization and Preventive Maintenance

Module 7: Customized Client Environments
- Standard Clients
- Custom Client Environments

Module 8: Networking Technologies
- Physical Network Connections
- TCP/IP
- Network Connectivity
- Ports and Protocols
- Set Up and Configure Windows Networking
- Networking Tools

Module 9: Installing, Configuring, and Maintaining SOHO Networks
- Install and Configure SOHO Networks
- SOHO Network Security

Module 10: Supporting Laptops
- Laptop Hardware and Components
- Install and Configure Laptop Hardware Components

Module 11: Mobile Computing
- Mobile Device Technologies
- Configure Mobile Devices

Module 12: Supporting Printers
- Printer Technologies
- Install, Configure, and Maintain Printers

Module 13: Security
- Security Fundamentals
- Security Threats and Vulnerabilities
- Security Protection Measures
- Workstation Security

Module 14: Troubleshooting Hardware Components
- Troubleshooting Theory
- Troubleshoot Video and Display Devices
- Troubleshoot Hard Drives and RAID Arrays
- Troubleshoot System Components
- Troubleshoot Laptops
- Troubleshoot Printers

Module 15: Troubleshooting System-Wide Issues
- Troubleshoot Operating Systems
- Troubleshoot Wired and Wireless Networks
- Troubleshoot Common Security Issues

Appendix A: Mapping Course Content to CompTIA® A+® Exam 220-801

Appendix B: Mapping Course Content to CompTIA® A+® Exam 220-802

Appendix C: CompTIA A+ Acronyms

Appendix D: A Brief History of Personal Computers