



CompTIA® A+® Certification: A Comprehensive Approach for All 2009 Exam Objectives

COMP-115

Course Description:

This CompTIA® A+® Certification: A Comprehensive Approach for All 2009 Exam Objectives course is designed to provide students with the knowledge to install, upgrade, repair, configure, optimize, troubleshoot, and perform preventative maintenance on basic personal computer hardware and operating systems.

Course Objectives:

Upon completion of the CompTIA® A+® Certification: A Comprehensive Approach for All 2009 Exam Objectives course, students will be able to:

- Identify the components of standard desktop personal computers
- Identify fundamental components and functions of personal computer operating systems
- Identify best practices followed by professional personal computer technicians
- Install and configure computer components
- Install and configure system components
- Maintain and troubleshoot peripheral components
- Troubleshoot system components
- Install and configure operating systems
- Maintain and troubleshoot installations of Microsoft Windows
- Identify network technologies
- Install and manage network connections
- Support laptops and portable computing devices
- Support printers
- Identify personal computer security concepts
- Support personal computer security

Prerequisites:

- The following skills are required: 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
- 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

Audience:

- 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

Course Duration:

5 Days

Course Topics:

I. Personal Computer Components

- Personal Computer Components
- System Unit Components
- Storage Devices
- Personal Computer Connection Methods

II. Operating System Fundamentals

- Personal Computer Operating Systems
- Windows User Interface Components
- Windows File System Management
- Windows System Management Tools

III. PC Technician Professional Best Practices

- Tools of the Trade
- Electrical Safety
- Environmental Safety and Materials Handling
- Perform Preventative Maintenance
- Diagnostics and Troubleshooting
- Professionalism and Communication

IV. Installing and Configuring Peripheral Components

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

V. Installing and Configuring System Components

- Install and Configure Storage Devices
- Select and Install Power Supplies
- Select and Install Memory
- Select, Install, and Configure CPUs and Cooling System Units
- Install and Configure System Boards

VI. Maintaining and Troubleshooting Peripheral Components

- Troubleshoot Display Devices
- Maintain and Troubleshoot Input Devices
- Troubleshoot Adapter Cards
- Troubleshoot Multimedia Devices

VII. Troubleshooting System Components

- Troubleshoot Storage Devices
- Troubleshoot Power Supplies
- Troubleshoot Memory
- Troubleshoot CPUs and Cooling Systems
- Troubleshoot System Boards

VIII. Installing and Configuring Operating Systems

- Install Microsoft Windows
- Upgrade Windows
- Add Devices to Windows
- Optimize Windows
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IX. Maintaining and Troubleshooting Microsoft Windows

- Operating System Utilities
- Back Up Microsoft Windows
- Troubleshoot Microsoft Windows
- Recover Microsoft Windows

X. Network Technologies

- Network Concepts
- Network Communications
- Network Connectivity
- Internet Technologies

XI. Installing and Managing Network Connections

- Create Network Connections
- Install and Configure Web Browsers
- Maintain and Troubleshoot Network Connections

XII. Supporting Laptops and Portable Computing Devices

- Laptop and Portable Computing Device Components
- Install and Configure Laptops and Portable Computing Devices
- Maintain and Troubleshoot Laptops and Portable Computing Devices

XIII. Supporting Printers

- Printer Technologies
- Printer Components
- Printer Processes
- Install and Configure Printers
- Maintain and Troubleshoot Printers

XIV. Personal Computer Security Concepts

- Security Fundamentals
- Security Protection Measures
- Data and Physical Security
- Wireless Security
- Social Engineering

XV. Supporting Personal Computer Security

- Install and Configure Security Measures
- Maintain and Troubleshoot Security Measures

- Appendix A: Mapping Course Content to the CompTIA A+ Essentials 220-701 Exam Objectives
- Appendix B: Mapping Course Content to the CompTIA A+ Practical Application 220-702 Exam Objectives
- Appendix C: CompTIA A+ Acronyms
- Appendix D: A Brief History of Personal Computers