

CompTIA A+ Certification: Essentials (2006 Objectives)

5 days

Description

This ILT Series course will prepare students for the CompTIA A+ Essentials certification exam (2006 Objectives). Students will obtain the skills and knowledge necessary to install, build, upgrade, repair, configure, troubleshoot, and perform preventative maintenance on personal computer hardware and operating systems.

Prerequisites

- None

Course Outline

Unit 1: Getting started with PC hardware support

Topic A: Computer components overview
Topic B: Hardware, software, and firmware
Topic C: Troubleshooting models

Unit 2: Operating systems

Topic A: Operating system fundamentals
Topic B: Directory and file management

Unit 3: Electricity and power supplies

Topic A: Electrical safety
Topic B: Power supplies
Topic C: Power supply troubleshooting

Unit 4: CPUs and motherboards

Topic A: Central processing units (CPUs)
Topic B: Packaging, slots, and cooling techniques
Topic C: Motherboards and system cases
Topic D: Motherboard troubleshooting

Unit 5: Basic Input/Output System

Topic A: BIOS and CMOS
Topic B: The POST process
Topic C: BIOS and POST troubleshooting

Unit 6: Memory systems

Topic A: Memory
Topic B: Memory packaging
Topic C: Memory troubleshooting

Unit 7: Bus structures

Topic A: Buses
Topic B: Host system interaction
Topic C: The PCI bus
Topic D: Video buses

Unit 8: Expansion cards

Topic A: Drive adapters
Topic B: Video cards
Topic C: Sound cards
Topic D: Internal modems
Topic E: Expansion card troubleshooting

Unit 9: Ports, connectors, and cables

Topic A: Serial and parallel ports, cables, and connectors
Topic B: Keyboards, mice, and pointing devices
Topic C: USB ports, cables, and connectors
Topic D: FireWire ports, cables, and connectors
Topic E: Infrared and Bluetooth wireless ports
Topic F: Multimedia ports, cables, and connectors
Topic G: Port, cable, and connector troubleshooting

Unit 10: Data storage devices

Topic A: Hard drives
Topic B: Optical drives
Topic C: Removable storage devices
Topic D: Storage device troubleshooting

Unit 11: Video and multimedia input/output devices

Topic A: Cathode ray terminals
Topic B: LCDs and other video technologies
Topic C: Sound input and output devices
Topic D: Scanners and cameras

Unit 12: Printers

Topic A: Dot matrix printers
Topic B: Inkjet and related printer technologies
Topic C: Laser printers
Topic D: Other types of printers

Unit 13: Portable computers and devices

Topic A: Notebook computers
Topic B: Handheld computers

Unit 14: Monitoring and management

Topic A: System monitoring
Topic B: System management

Unit 15: Operating system troubleshooting

Topic A: The Windows boot process
Topic B: System troubleshooting

Unit 16: Connecting computers

Topic A: Networking concepts
Topic B: Wired network connections
Topic C: Wireless network connections
Topic D: Network architectures

Unit 17: Networking computers

Topic A: Network communications
Topic B: Addressing
Topic C: Internet connections
Topic D: Network installation
Topic E: Network troubleshooting

Unit 18: Security

Topic A: Operating system security
Topic B: Security hardware
Topic C: The human aspects of security

Unit 19: Windows installation and upgrades

Topic A: Installation
Topic B: Upgrades

Unit 20: Safety

Topic A: Safety and hazards
Topic B: Safe work practices
Topic C: Disposing of computer equipment

Unit 21: Troubleshooting and maintaining a PC

Topic A: Professionalism and customer satisfaction
Topic B: Tools and software
Topic C: Preventative hardware maintenance