

A+ ESSENTIALS

Available Dates: **Call for Availability**

Class Length: **5 day**

Cost: **\$2,495**

[Email Computer Visions about this class](#)

Class Outline:

Description:

This course will prepare students for the CompTIA A+ Essentials certification exam (2009 Objectives). Students will obtain the skills and knowledge necessary to install, build, upgrade, repair, configure, troubleshoot, and performing preventative maintenance on personal computer hardware and operating systems.

Course Length: Five Days

Course Outline:

Unit 1: Troubleshooting methodology

Topic A: Troubleshooting models

Topic B: Professionalism

Unit 2: Operating systems

Topic A: Operating system fundamentals

Topic B: Directory and file management

Topic C: File and folder permissions

Unit 3: Electricity and power supplies

Topic A: Electrical safety

Topic B: Power supplies

Unit 4: CPUs and motherboards

Topic A: Central processing units

Topic B: Packaging, slots, and cooling techniques

Topic C: Motherboards

Unit 5: The Basic Input/Output System

Topic A: The BIOS and CMOS

Topic B: The POST and boot processes

Unit 6: Memory systems

Topic A: Memory

Topic B: Memory packaging

Topic C: Memory monitoring

Unit 7: Bus structures

Topic A: Buses

Topic B: The PCI bus

Topic C: Video buses

Unit 8: Expansion cards

Topic A: Drive adapters

Topic B: Video cards

Topic C: Sound cards

Topic D: Internal modems

Unit 9: Peripheral connection types

Topic A: Serial and parallel connections

Topic B: PS/2 connections

Topic C: USB connections

Topic D: FireWire connections

Topic E: Multimedia connections

Unit 10: Data storage devices

Topic A: Hard drives

Topic B: Optical drives
Topic C: Removable storage devices
Topic D: Drive maintenance

Unit 11: Video output and image input devices

Topic A: Monitors
Topic B: Scanners and cameras

Unit 12: Printers

Topic A: Printing technologies
Topic B: Printer installation and optimization

Unit 13: Connecting computers

Topic A: Networking concepts
Topic B: Wired network connections
Topic C: Basic internetworking devices

Unit 14: Networking computers

Topic A: Addressing
Topic B: Client configuration

Unit 15: Portable computers

Topic A: Notebook computers
Topic B: Notebook issues

Unit 16: Monitoring and management

Topic A: System monitoring
Topic B: System performance
Topic C: System management

Unit 17: Operating system troubleshooting

Topic A: Windows startup
Topic B: System troubleshooting

Unit 18: Security

Topic A: Operating system security
Topic B: Windows Encrypted File System
Topic C: Security hardware
Topic D: The human aspects of security

Unit 19: Windows installation and upgrades

Topic A: Windows installation
Topic B: Upgrades

Unit 20: Safety and maintenance

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

Unit 21: Troubleshooting hardware

Topic A: Backups
Topic B: Hardware problems