



Enhanced Network Solutions Group

Systems Integration • Learning Solutions • CIO Consulting
Managed Outsourcing • Healthcare Solutions • Security Solutions

7224 Engle Road - Fort Wayne, IN 46804 - Phone: (260) 432-1364 - Fax: (260) 432.3168

CompTIA A+ Certification: Comprehensive, 2009 Edition Windows 7

APLUS7 Rev 01.12

5 days

Description

This ILT Series course provides comprehensive training for students who already have some existing knowledge of, and support experience with, networked desktop and notebook computers running Windows 2000 Professional or any Windows XP or Windows Vista operating system. This course will prepare students, at an accelerated pace, for the two exams that make up the A+ certification 2009 Edition: CompTIA A+ Essentials and CompTIA A+ Practical Application. Students will gain the skills and knowledge necessary to perform the following tasks on personal computer hardware and operating systems: installation, PC building, system upgrades, repair, system configuration, troubleshooting, problem diagnosis, and preventative maintenance.

Prerequisites

- *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*
- *Windows XP: Basic, Windows Vista: Basic, or Windows 7: Basic*
- *Microsoft Windows XP: Advanced, Windows Vista: Advanced, or Windows 7: Advanced*

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 management
Topic C: File management
Topic D: File and folder permissions

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
Topic B: Cooling techniques
Topic C: Motherboards
Topic D: Motherboard and CPU troubleshooting

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 installation
Topic D: Memory monitoring
Topic E: Memory troubleshooting

Unit 7: Bus structures

Topic A: Buses
Topic B: The PCI bus
Topic C: Video buses

Unit 8: Expansion cards

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



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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
Topic F: Port, cable, and connector troubleshooting

Unit 10: Data storage devices

Topic A: Drive adapters
Topic B: Hard drives
Topic C: Optical drives
Topic D: Removable storage devices
Topic E: Drive maintenance
Topic F: Storage device troubleshooting

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
Topic C: Printer optimization and maintenance
Topic D: Printer troubleshooting

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: Network troubleshooting

Topic A: Troubleshooting basics
Topic B: Troubleshooting the network

Unit 16: Portable computers

Topic A: Notebook computers
Topic B: Configuration
Topic C: Component replacement
Topic D: Notebook issues

Unit 17: Windows management

Topic A: System management
Topic B: Task Scheduler
Topic C: Resource management
Topic D: Remote management

Unit 18: Windows monitoring

Topic A: System monitoring
Topic B: System performance
Topic C: Backup and restore

Unit 19: Operating system troubleshooting

Topic A: Windows startup
Topic B: System troubleshooting

Unit 20: Security

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

Unit 21: Windows installation and upgrades

Topic A: Windows installation
Topic B: Upgrades

Unit 22: Safety and maintenance

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

Appendix A: System cases

Topic A: System cases

Appendix B: Binary, octal, and hexadecimal numbering

Topic A: Count like a computer

Appendix C: CompTIA A+ acronyms

Topic A: List of abbreviations

Appendix D: Certification exam objectives map

Topic A: Essentials (2009) comprehensive exam objectives
Topic B: Practical Application (2009) comprehensive exam objectives



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