

# CompTIA A+

## Comprehensive (701 & 702)

### (2009 Edition)

#### Topic-Level Outline

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**Prerequisites:** This comprehensive course is taught at an accelerated pace. In order to have a successful learning experience, students should have existing knowledge of, and support experience with, networked desktop and notebook computers, as well as advanced user-level skills in Windows Vista, Windows XP, or Windows 2000 Professional.

**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

**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:** Troubleshooting peripheral connections

**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 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:** 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:** Human aspects of security

**Unit 21: Windows installation/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