

# CompTIA A+ Comprehensive (Exams 220 – 1001 and 220 – 1002)



**Days:** 5

**Prerequisites:** To ensure your success in this course, you should have basic computer user skills, be able to complete tasks in a Microsoft® Windows® environment, be able to search for, browse, and access information on the Internet, and have basic knowledge of computing concepts.

**Audience:** This course is designed for individuals who have basic computer user skills and who are interested in obtaining a job as an entry-level IT technician. This course is also designed for students who are seeking the CompTIA A+ certification and who want to prepare for the CompTIA A+ 220-1001 Certification Exam and the CompTIA 220-1002 Certification Exam.

**Description:** 30 Bird Media's instructor-led course, Comprehensive Computer Technician, provides the basic knowledge needed to install, configure, and support computer hardware and operating systems. This includes:

- Assembling components based on customer requirements
- Installing, configuring and maintaining devices, PCs, and software for end users
- Understanding the basics of networking and security/forensics
- Properly and safely diagnosing, resolving, and documenting common hardware and software issues
- Applying troubleshooting skills
- Providing appropriate customer support
- Understanding the basics of virtualization, desktop imaging, and deployment

This course maps to the CompTIA A+ 220-1001 and 220-1002 certification exams. Objective coverage is marked throughout the course.

## OUTLINE:

### INTRODUCTION

- Course setup
- Computer technician skills inventory

### CHAPTER 1: TROUBLESHOOTING

- Module A: Troubleshooting theory
- Module B: Safety
- Module C: Professionalism

### CHAPTER 2: MOTHERBOARDS AND CPUs

- Module A: Motherboards
- Module B: CPUs

### CHAPTER 3: COMPUTER POWER SUPPLIES

- Module A: Power supply connectors

- Module B: Power supply installation
- Module C: Power supply troubleshooting

### CHAPTER 4: MEMORY

- Module A: Read-only memory
- Module B: Random access memory

### CHAPTER 5: COMPUTER EXPANSION

- Module A: Expansion interfaces
- Module B: Expansion card installation
- Module C: Connectors and cables

### CHAPTER 6: PHYSICAL STORAGE

- Module A: Disk drives

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## **(Exams 220 – 1001 and 220 – 1002)**

- Module B: RAID storage
- Module C: Optical drives
- Module D: Other storage methods

### **CHAPTER 7: INPUT-OUTPUT DEVICES**

- Module A: Input devices
- Module B: Output devices
- Module C: Dual input-output devices

### **CHAPTER 8: DISPLAY DEVICES**

- Module A: Display technologies
- Module B: Display management

### **CHAPTER 9: OPERATING SYSTEMS**

- Module A: Windows versions and features
- Module B: Non-Windows operating systems
- Module C: Operating system installation and upgrades
- Module D: Applications and scripting

### **CHAPTER 10: WINDOWS MANAGEMENT**

- Module A: Operating system features and tools
- Module B: Control Panel utilities
- Module C: Command-line tools
- Module D: Operating system troubleshooting

### **CHAPTER 11: NETWORK BASICS**

- Module A: Classifying networks
- Module B: Network devices
- Module C: Internet connections

### **CHAPTER 12: NETWORK CABLES AND CONNECTORS**

- Module A: Twisted-pair connections
- Module B: Coaxial connections
- Module C: Optical media

### **CHAPTER 13: NETWORK PROTOCOLS**

- Module A: TCP/IP settings
- Module B: Transport protocols
- Module C: Application protocols

### **CHAPTER 14: WIRELESS NETWORKING**

- Module A: Wireless technology

- Module B: Wi-Fi standards

### **CHAPTER 15: WINDOWS NETWORKING**

- Module A: Network shares
- Module B: Network connections
- Module C: Connection troubleshooting

### **CHAPTER 16: VIRTUALIZATION AND CLOUD COMPUTING**

- Module A: Virtualization
- Module B: Cloud computing

### **CHAPTER 17: MOBILE DEVICES**

- Module A: Mobile device types
- Module B: Mobile device configuration
- Module C: Mobile device troubleshooting

### **CHAPTER 18: SECURITY PRINCIPLES**

- Module A: Threats and vulnerabilities
- Module B: Security controls

### **CHAPTER 19: SECURITY TECHNOLOGIES**

- Module A: Operating system security
- Module B: Security hardware and software

### **CHAPTER 20: SECURING DEVICES AND DATA**

- Module A: Workstation security
- Module B: Mobile device security
- Module C: Security troubleshooting

### **CHAPTER 21: SOHO NETWORK CONFIGURATION**

- Module A: SOHO router features
- Module B: Network security

### **CHAPTER 22: PRINTERS AND MULTI-FUNCTION PRINT DEVICES**

- Module A: Printer technologies
- Module B: Printer installation and maintenance
- Module C: Printer troubleshooting

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## **CHAPTER 23: CUSTOM COMPUTERS**

- Module A: Custom computer considerations

## **CHAPTER 24: OPERATIONAL PROCEDURES**

- Module A: IT operations
- Module B: Environmental factors
- Module C: Incident response
- Module D: Backup and recovery