

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. You can obtain this level of skills and knowledge by taking any introductory computing course from Logical Operations, such as:

- Using Microsoft® Windows® 10

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: If you are getting ready for a career as an entry-level information technology (IT) professional or computer service technician, the CompTIA® A+® course is the first step in your preparation. The course will build on your existing user-level knowledge and experience with personal computer (PC) software and hardware to present fundamental skills and concepts that you will use on the job. In this course, you will acquire the essential skills and information you will need to install, configure, optimize, troubleshoot, repair, upgrade, and perform preventive maintenance on PCs, digital devices, and operating systems. This course provides the background knowledge and skills you will require to be a successful A+ technician. It can also assist you if you are preparing to take the CompTIA A+ certification examinations, 2016 objectives (exam numbers 220-901 and 220-902), in order to become a CompTIA A+ Certified Professional.

Course Objectives: In this course, you will install, configure, optimize, troubleshoot, repair, upgrade, and perform preventive maintenance on personal computers, digital devices, and operating systems.

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

CompTIA A+ Comprehensive

(Exams 220 – 1001 and 220 – 1002)

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

CHAPTER 23: CUSTOM COMPUTERS

- Module A: Custom computer considerations

CompTIA A+ Comprehensive

(Exams 220 – 1001 and 220 – 1002)

CHAPTER 24: OPERATIONAL PROCEDURES

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