

COMPTIA A+ CERTIFICATION PREP (202-1001/1002)

CompTIA

Course Introduction:

CompTIA's A+ Certification is the industry standard for validating the foundational skills needed by today's computer support technicians and is included in the approved list of certifications to meet DoD Directive 8570.1 requirements. This international vendor-neutral certification requires that you pass two exams: **CompTIA A+ Essentials Exam 220-1001** and **Practical Application Exam 220-1002**.

This course is focused on providing the knowledge of basic computer hardware and operating systems needed to prepare for the CompTIA A+ certification exam. You will cover the essential principles of installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, and preventative maintenance on desktop and laptop computers. You will also learn the elements of customer service and communication skills necessary to work with clients. Instructor-led practice exams and quizzes help reinforce course concepts and exam readiness.

Our A+ Prep Course courseware has received CompTIA Authorized Quality Curriculum (CAQC) approval. The CompTIA CAQC symbol assures you that all test objectives are covered in the training material.

This full-service test preparation course includes:

- A+ study guide
- A+ pre- and post-assessment test questions
- Comprehension exercises and study digest
- Voucher for each A+ exam
- Custom labs for hands-on learning

What You'll Learn:

- Prepare for the latest A+ certification exams.
- Support basic IT infrastructure, including endpoint management, advanced device connectivity troubleshooting, and basic networking.
- Configure and support PC, mobile and IoT device hardware, including components, connectors and peripherals.
- Implement basic data backup and recovery methods and apply data storage and management best practices.
- Demonstrate baseline security skills for IT support professionals, including detecting and removing malware, addressing privacy concerns, physical security and device hardening.
- Configure device operating systems, including Windows, Mac, Linux, Chrome OS, Android and iOS and administer client-based as well as cloud-based (SaaS) software.
- Troubleshoot and problem solve core service and support challenges while applying best practices for documentation, change management, and the use of scripting in IT support.

Prerequisites:

- End-user skills with Windows-based PCs
- Basic knowledge of computing concepts

Who Should Attend:

Individuals seeking **CompTIA A+ Certification (220-1001 and 220-1002)**

CompTIA A+ Certification Prep (202-1001/1002)

Course Outline:

Lesson 1: Troubleshooting

- Troubleshooting theory
- Safety
- Professionalism

Lesson 2: Motherboards and CPUs

- Motherboards
- CPUs

Lesson 3: Power supplies and power connectors

- Power supply connectors
- Power supply installation
- Power supply troubleshooting

Lesson 4: Memory

- Read-only memory
- Random access memory

Lesson 5: Computer expansion

- Expansion interfaces
- Expansion card installation
- Connectors and cables

Lesson 6: Physical storage

- Disk drives
- RAID storage
- Optical drives
- Other storage methods

Lesson 7: Input-Output devices

- Input devices
- Output devices
- Dual input-output devices

Lesson 8: Display devices

- Display technologies
- Display management

Lesson 9: Operating systems

- Windows versions and features
- Non-Windows operating systems
- Operating system installation and upgrades
- Applications and scripting

Lesson 10: Windows management

- Operating system features and tools
- Control Panel utilities
- Command-line tools
- Windows troubleshooting

Lesson 11: Network basics

- Classifying networks
- Network devices
- Internet connections

Lesson 12: Network cables and connectors

- Twisted-pair connections
- Coaxial connections
- Optical media

Lesson 13: Network protocols

- TCP/IP settings
- Transport protocols
- Application protocols

Lesson 14: Wireless networking

- Wireless technology
- Wi-Fi standards

Lesson 15: Windows networking

- Network shares
- Network connections
- Connection troubleshooting

Lesson 16: Virtualization and cloud computing

- Virtualization
- Cloud computing

Lesson 17: Mobile devices

- Mobile device types
- Mobile device configuration
- Mobile device troubleshooting

Lesson 18: Security principles

- Threats and vulnerabilities
- Security controls

Lesson 19: Security technologies

- Operating system security
- Security hardware and software

Lesson 20: Securing devices and data

- Workstation security
- Mobile device security
- Security troubleshooting

Lesson 21: SOHO network configuration

- SOHO router features
- Network security

Lesson 22: Printers and multi-function devices

- Printer technologies
- Printer installation and maintenance
- Printer troubleshooting

Lesson 23: Custom computers

- Custom computer considerations

Lesson 24: Operational procedures

- IT operations
- Environmental factors
- Incident response
- Backup and recovery

CompTIA®