

COMPTIA A+

thinQtank® Learning is offering a unique three day training camp in which students can receive the latest in CompTIA A+ Certification. This course is one component of our 8570.1 Training Solution that also includes assessments, certification preparation and program management, post training, 8570 compliancy tracking and reporting, and continuing education.

With the CompTIA A+ certification exam preparation and training, you'll gain the needed knowledge of basic computer hardware and operating systems. 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 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 CompTIA A+ Certification Guarantee and Recertification Package

Should an attendee complete our A+ Training Camp Program without having successfully passed the vendor exams, one free additional voucher will be provided. Should the student fail the second attempt, the student may re-attend the program for a period of up to one year free of charge. Student would only be responsible for any accommodation fees. We also provide mentoring programs post and prior to class to support your learning plan.



thinQtank® Learning Exclusive

In our classroom, students receive gigabytes of take-home CBT and lab material with take-home labs to keep practicing and refining the skills learned in the classroom. Additionally, our students receive:

- ✓ Customized A+ Courseware and a A+ Lab Guide with hands-on labs
- ✓ thinQtank® Accelerated Exam Study Guides
- ✓ Over 60 hours of lectures, hands-on labs, topic reviews and test preparation.
- ✓ **Exam Delivery in the classroom with a 95% success rate**
- ✓ Custom and focused exam preparation software and materials
- ✓ Course specific thinQtank® Learning publications to promote a fun and exciting learning
- ✓ Membership to the thinQtank® Learning University Online
- ✓ Official CompTIA A+ Examination Vouchers are included
- ✓ WE DO NOT "TEACH THE TEST" – Students will receive valuable hands-on experience
- ✓ Receive all of the reading material and exam study guides as soon as you register

 Are You Affected by the DoD Directive 8570.1?

 Beginning January 1, 2013, the Department of Defense (DoD) will only recognize CompTIA certifications with the CE designation as approved DoD Information Assurance baseline certifications. If you earned your CompTIA certification on or after January 1, 2011, follow the standard renewal procedures outlined above. If you earned certification prior to 2011, you must enroll in the continuing education program to update your certification to the CE version. Please review our FAQs for details.



 Are There Any Prerequisites?

 This course is intended for professionals with basic computer literacy, basic PC operating system navigation and internet usage skills, and basic IP address knowledge. If you are unsure about your background and skill set, we will help you decide which path is best for you.

 Who Should Attend?

 Network engineers, network administrators, network managers, and system engineers as well as network designers, planners, implementers, and optimizers. Anyone wishing to attain the A+ certification.



What You Should Expect to Learn

A+ Essentials

- PC Hardware
 - Configure and apply BIOS settings
 - Differentiate between motherboard components, their purposes, and properties
 - Compare and contrast RAM types and features
 - Install and configure expansion cards
 - Install and configure storage devices and use appropriate media
 - Differentiate among various CPU types and features and select the appropriate cooling method
 - Compare and contrast various connection interfaces and explain their purpose
 - Install an appropriate power supply based on a given scenario



- Evaluate and select appropriate components for a custom configuration, to meet customer specifications or needs
- Given a scenario, evaluate types and features of display devices
- Identify connector types and associated cables
- Install and configure various peripheral devices
- Networking
 - Identify types of network cables and connectors
 - Categorize characteristics of connectors and cabling
 - Explain properties and characteristics of TCP/IP
 - Explain common TCP and UDP ports, protocols, and their purpose
 - Compare and contrast wireless networking standards and encryption types
 - Install, configure, and deploy a SOHO wireless/wired router using appropriate settings
 - Compare and contrast Internet connection types and features
 - Identify various types of networks
 - Compare and contrast network devices, their functions, and features
 - Given a scenario, use appropriate networking tools
- Laptops
 - Install and configure laptop hardware and components
 - Compare and contrast the components within the display of a laptop
 - Compare and contrast laptop features
- Printers
 - Differences between printer types and summarize associated imaging process
 - Given a scenario, install, and configure printers
 - Given a scenario, perform printer maintenance



- Operational Procedures
 - Given a scenario, use appropriate safety procedures
 - Explain environmental impacts and the purpose of environmental controls
 - Given a scenario, demonstrate proper communication and professionalism
 - Explain the fundamentals of dealing with prohibited content/activity

A+ Practical Application

- Operating Systems
 - Compare features and requirements of Microsoft Operating Systems
 - Given a scenario, install, and configure the operating system using the most appropriate method
 - Given a scenario, use appropriate command line tools
 - Given a scenario, use appropriate operating system features and tools
 - Given a scenario, use Control Panel utilities (the items are organized by “classic view/large icons” in Windows)
 - Setup and configure Windows networking on a client/desktop
 - Perform preventive maintenance procedures using appropriate tools
 - Explain the differences among basic OS security settings
 - Explain the basics of client-side virtualization
- Security
 - Apply and use common prevention methods
 - Compare and contrast common security threats
 - Implement security best practices to secure a workstation
 - Given a scenario, use the appropriate data destruction/disposal method
 - Given a scenario, secure a SOHO wireless network
 - Given a scenario, secure a SOHO wired network



- Mobile Devices
 - Explain the basic features of mobile operating systems
 - Establish basic network connectivity and configure email
 - Compare and contrast methods for securing mobile devices
 - Compare and contrast hardware differences in regards to tablets and laptops
 - Execute and configure mobile device synchronization
- Troubleshooting
 - Given a scenario, explain the troubleshooting theory
 - Given a scenario, troubleshoot common problems related to motherboards, RAM, CPU and power with appropriate tools
 - Given a scenario, troubleshoot hard drives and RAID arrays with appropriate tools
 - Given a scenario, troubleshoot common video and display issues
 - Given a scenario, troubleshoot wired and wireless networks with appropriate tools
 - Given a scenario, troubleshoot operating system problems with appropriate tools
 - Given a scenario, troubleshoot common security issues with appropriate tools and best practices
 - Given a scenario, troubleshoot, and repair common laptop issues while adhering to the appropriate procedures
 - Given a scenario, troubleshoot printers with appropriate tools

Q. Once I Successfully Complete This Course, What is Next?

- A.**
- CompTIA Security+
 - Cisco CCENT Training Camp
 - Cisco CCNA Training Camp





Course Outline

- Motherboards and Expansion Cards
 - Safety procedures
 - Motherboards
 - BIOS settings
 - Expansion cards
- CPUs and Power Supplies
 - CPUs
 - Power supplies
- Memory and Physical Storage
 - RAM types and features
 - Storage devices and media
- Connections
 - Connection interfaces
 - Connectors and cables
- Peripheral Devices
 - Display devices
 - Other devices
- Printers
 - Imaging processes
 - Printer installation
 - Printer maintenance
- Notebooks
 - Notebook hardware components



- Notebook displays
- Laptop features
- Networking Basics
 - Networks
 - Internet connection types
 - Network devices
 - Networking basics
- The Physical Network
 - Network cable and connector types
 - Cable and connector properties
 - Networking tools
- Networking Protocols
 - TCP/IP
 - Ports and protocols
- Wireless Networking
 - Wireless networking standards
 - Wireless SOHO networking
- Professional Conduct
 - Communication and professionalism
 - Environmental issues
 - Incident response
- Troubleshooting Basics
 - Troubleshooting methodology
 - The troubleshooting toolkit
- Client Operating Systems
 - Comparing Windows editions



- Configuring Windows Explorer
- Command line utility
- Virtualization
- Configuring the Operating System
 - System configuration tools
 - System information and monitoring
 - Task management
 - Configuration files
- Configuring Hardware Settings
 - Device and hardware settings
 - Disks and partitions
- Networking PCs
 - Creating network connections
 - Sharing files and printers
 - Remote connections
- Authentication and User Security
 - Users and authentication
 - Windows security policies
 - File system security
- Securing Systems and Data
 - Identifying common threats
 - Physical security
 - Digital security
 - Data destruction and disposal
 - Malware detection and removal
- Preventative Maintenance



- Performing backups
- Disk maintenance
- Updating software
- Securing Networks
 - Securing wired networks
 - Securing wireless networks
- Troubleshooting System Hardware
 - Troubleshooting core system elements
 - Troubleshooting storage devices
 - Troubleshooting laptop computers
- Display and Printer Troubleshooting
 - Troubleshooting display issues
 - Printer troubleshooting
- Network Troubleshooting
 - Troubleshooting the physical network
 - Troubleshooting the logical network
- Operating System Troubleshooting
 - Startup and recovery tools
 - Troubleshooting Windows and application issues
- Mobile Devices
 - Comparing tablets and laptops
 - Basic features of mobile operating systems
 - Mobile networks and e-mail
 - Securing mobile devices
 - Synchronizing data
- Operating System Installation and Upgrades



- Preparing to install Windows
- Windows installation
- Windows upgrades and compatibility
- CompTIA A+ Acronyms
- Certification Exam Objectives Map



Exam Information

- 220-801 – A+ Essentials Exam
- 220-802 – A+ Practical Application Exam

Exam Renewal

Beginning January 1, 2011, CompTIA A+ certification holders are required to renew their credential every three years. Renewal can be achieved two ways:

- Take the most current version of the CompTIA A+ certification exam.
- Earn continuing education units (CEUs) by participating in qualified activities such as publishing an article or white paper, obtaining another industry certification, or attending a relevant conference or event. The CompTIA A+ certification renewal requires 30 CEUs per renewal period.

Certifications earned beginning in 2011 will contain the designation "CE" to indicate the certification is subject to the renewal policy. If you achieved certification prior to 2011 (the non-CE version), you will retain your certification for life. No renewal is required, although you may choose to or be required to enroll in the continuing education program.

