

PC/Network Technician Certification Program CompTIA A+ and Microsoft Certified Desktop Support Tech (MCDST) Certifications

ZAPL- 007 PC/Network Technician Certification Program (CompTIA A+ and Microsoft Desktop Support Technician MCDST Certifications)
Fee: \$4,995 or \$4,495 with discount when registered and paid in full at least one week before class start date.- Includes training, comprehensive reference library, tool kit, practice exams, and one set of exam vouchers.



Program Description

The PC/Network Technician Program at STCC involves 160+ hours of hands-on instruction to prepare for the **CompTIA A+ and Microsoft Certified Desktop Support Technician (MCDST) certifications** and an opportunity to participate in real-world internships. The course material goes well beyond the scope of the exams and focuses on preparing the student to be successful as a PC/Network technician. The program covers all the material necessary to pass the CompTIA A+ Certification exams and the Microsoft (MCDST) exams.

The program prepares students for the CompTIA A+ Essentials Exam and the IT Technician exam; the student needs to take the essentials and one job-role exam. The program also prepares the student for the two Microsoft MCDST certification exams. The MCDST certification also counts towards MCP certification. So once a student passes the four exams they will have the following credentials CompTIA A+ Certified IT Technician, Microsoft MCDST, and Microsoft MCP certifications. This program is designed specifically for CompTIA exams 220-601 & 220-602.

- **CompTIA A+ Certification (2 Exams)**

- **Exam 220-601** CompTIA A+ Essentials Exam * *Required*
- and **one** of the following Job-role Exams:
 - **Exam 220-602** (IT Technician) * *Recommended*
 - **Exam 220-603** (Remote Support Technician)
 - **Exam 220-604** (Depot Technician)



- **Microsoft Certified Desktop Support Technician (MCDST) (2 Exams)**

- **Exam 70-271:** Supporting Users and Troubleshooting a Microsoft Windows XP Operating System
- **Exam 70-272:** Supporting Users and Troubleshooting Desktop Applications on a Microsoft Windows XP Operating System

Each student receives an extensive reference library and a PC tool kit to keep. The classes are held on weeknights and Saturdays. An updated schedule of specific dates, classrooms and labs is maintained on the CBT Website. The program is taught by professional instructors with thousands of hours of teaching experience who are CompTIA, Cisco, IBM, and Microsoft Certified. CBT has been offering A+ training since 1997 and has an 85-95% pass rate for students taking the exams.

Blended Learning

These courses now include extensive online courses to prepare the student for the A+ exams. Students will have access to this online material for up to 5 months so that the learning can continue even after the classroom component is completed. Courses include online video and slideshow lectures and hands-on labs.

Internship Opportunity

CBT works with area businesses and organizations to provide our PC/Network Technicians an opportunity to work as interns. Our students work side by side with the company's IT staff to solve PC and network problems. These unpaid internships last anywhere from 8 to 20 hours and allow students to get a sense of what being a PC/Network Technician is all about and gain valuable, real-world experience.

Course Module Descriptions

This program is presented as a series of distinct modules, but participants must register for the full PC/Network Technician Program. Space limitations prevent the acceptance of registrations for selected segments of the program.

CompTIA A+ Kickoff (2.5 hours)

Students receive their extensive reference library, toolkit, and other materials. The instructors will go over the logistics of the course including the inclement weather policy and assign reading assignments to prepare for the first class. Special programs available only to CompTIA A+ students will be explained. Each student will also create a Microsoft IT Academy online account and register for several online courses that they will be able to access to enhance their learning experience throughout the next year.

Computer Hardware and Operating Systems Fundamentals (24 hours)

This introductory module covers the fundamentals of PC hardware, and operating systems. The following topics are covered: PC hardware, booting the computer, hard disk management, drives, subdirectories (folders), structures, file management, batch files, executing programs, memory management (16-bit and 32-bit Operating Systems). We utilize all the major PC Operating Systems from DOS to Windows XP to explore these topics to prepare you for the rest of the course and your career in the field.

Basic Computer Maintenance (28 hours)

This seminar is designed to introduce the students to basic computer hardware components and the proper handling of equipment while installing, upgrading, diagnosing, and repairing both PC hardware and software configurations. Students will use a selection of tools, meters to complete instructor guided labs to learn the proper techniques. Some of the topics covered include: CPUs, I/O bus architectures, memory, interfaces, ports, hardware and software interrupts, common troubleshooting procedures, and Field Replaceable Units (FRUs). Student's will learn how disassemble and reassemble PC Hardware, as well as install new components such as Hard Drives, RAM, Sound Cards, and assorted other components. Students will learn to utilize the Internet to gather the latest information and Device Drivers.

Advanced Hardware and Troubleshooting (24 hours)

Extensive hands-on, instructor-led labs utilizing some of the latest technology will be presented to demonstrate and teach the proper techniques in computer maintenance and advanced troubleshooting. This course will expand on the areas covered in the Basic Computer module. Participants will explore common PC hardware components (communication ports, peripheral interfaces and modems) in depth and the techniques used to troubleshoot PC systems. Students will use both software and hardware diagnostic tools such as multimeters to troubleshoot a variety of problems, as well as explore the benefits of Preventive Maintenance.

Preventive Maintenance and Safety (4 hours)

This course covers sound maintenance practices for computer systems that will help ensure continued system operations and extended PC life. The material covered will include common preventive maintenance techniques such as cleaning screens, keyboards, mouse, floppy drives and hard drive care, and vacuuming system units. Other topics include: environmental concerns (temperature, moisture, and air quality) ESD, EMI, RFI, and electrical power source conditions.

Introduction to Networks: Ethernet to Wireless (8 hours) *

Students will explore networking fundamentals; demystify how network transmissions travel from one PC to another over a network, or from one network to another network. We will explore how Hubs, Switches, and Routers work in relationship to the OSI model. In exploring this technology and the OSI model we will gain a basic understanding of Collision Domains, Broadcast Domains, VLANs, and Firewalls. The course will concentrate on current industry technology such as Ethernet & Wireless Networks and Telephony. Students will also install a wireless network in the computer lab and then learn how to secure it using encryption.

Understanding TCP/IP (4 hours) *

This module will explore the TCP/IP protocol suite through an understanding of how the OSI model works. We will explore the interaction of network communications as it relates to the different layers of the model. In covering the TCP/IP suite we will discuss client IP configurations including: IP Addresses, Subnet Masks, Default Gateways, DNS servers and how DHCP is used to dynamically supply these settings. Students will also learn how DNS works in resolving Domain names to IP addresses, and how Website URL's and IP addresses are linked in the global DNS directory system. Student's will also learn how to dissect an IP address and subnet mask to quickly determine the host devices Network address, Broadcast address, and the valid range of addresses in it's network. With this knowledge, we will explore how to troubleshoot IP networks configured into organizational VLANs ..

Microsoft Certified Desktop Support Technician (MCDST) (36 hours)*

The Microsoft Certified Desktop Support Technician (MCDST) certification will get you started in your IT career by ensuring that you have the skills to troubleshoot desktop environments running on the Microsoft Windows operating system. This instructor-led course will provide individuals who are new to Microsoft Windows XP with the knowledge and skills necessary to troubleshoot basic problems end users will face while running Microsoft Windows XP Professional in an Active Directory network environment, or Windows XP Home edition in a workgroup environment. This is an introductory course designed to provide an overview of operating system concepts and how to troubleshoot Windows XP. After completing this module, students will be able to explain how to use troubleshooting guidelines and tools to support users running applications on Windows desktops. Students will be able to troubleshoot application compatibility issues and security issues related to applications on client computers that run Windows XP. For a more detailed description of this course visit our Microsoft Certification page <http://cbt.stcc.edu/itcert/microsoft.asp>. For those students looking to attain their Microsoft MCSA certification, the MCDST certification can be used as an elective. Once the student passes the MCDST certification, he/she has fulfilled the requirements to attain the Microsoft Certified Professional (MCP) Certification



A+ Operating System Certification Prep (8 hours)

This module is designed to cover those CompTIA Certification Operating System topics which were not covered in the MCDST course material. The emphasis is on 2000/XP/2003 and their utilization in today's work environment.

PC/Network Protection: Spyware & Viruses (4 hours) *

This workshop gives users an overview of the security risks to their PCs and networks, and explores the available countermeasures. Virtually every PC is at risk if they have Internet connectivity, especially in the context of always being on through broadband access services (such as cable and DSL modems), as well as the traditional dial-up.

Major topics will include: malicious software i.e.; Viruses, Spy-ware, Pop-ups and E-mail Spam and what to do to prevent these attacks. In addition, participants will learn about Child protection software and how to develop a policy for personal and small office home office (SOHO) systems.

Introduction to LINUX (4 hours) *

This module will introduce the student to the world of Unix/Linux which is gaining in popularity in the area on E-Commerce and web hosting. Students will learn to install and navigate through Linux to become familiar with its look and feel. CompTIA does not presently test on any UNIX/Linux objectives, but it is important that students who complete our program have at least a minimal exposure to this OS environment.

Review and Preparation for CompTIA A+ Certification Program Exams (12 hours)

These sessions are designed to prepare the student for the CompTIA A+ Certification Program exams and Windows MCDST exams. The seminars include a review of the material covered in the previous sessions with a focus on the areas emphasized on the tests. These instructor-led seminars will include ample time to allow each participant to focus on areas in which he/she needs help, as well as coverage of test-taking tips and strategies, and computer-based practice tests similar to the actual certification examinations.

Resume Writing & Interviewing Skills Workshop (4 hours)

This module will allow students who are seeking employment to take advantage of the College's Cooperative Education/Career Services and Transfer Affairs Department. Another resource available to students who are seeking employment would be those services available through the area One-Stop Career Centers. Workshop participants will learn how to write a professional resume and a winning cover letter. In addition, this workshop will cover interviewing skills and techniques as well as the pros and cons of social networking. Other topics that will be covered in this workshop will include developing a career portfolio and the importance financial literacy. Once students have developed a resume they are encouraged to submit it to the lead instructor, for review and editing suggestions.

CompTIA A+ and MCDST Certification Exams

Each student in the program will be registered to take two CompTIA A+ Certification exams, and two Microsoft MCDST certification exams. The price of one complete set of four (4) exam vouchers is included in the program fee. If the student passes the two CompTIA A+ exams they will be CompTIA A+ Certified IT Technician, and if the student passes the two MCDST exams they will be Microsoft Certified Desktop Support Technician (MCDST) as well as a Microsoft Certified Professional (MCP). If the student fails to pass any certification exam, he/she would be responsible for paying the fee(s) to retake. Through our status as a CompTIA member and a Microsoft IT Academy, we are able to make discounted vouchers available to our students for retesting.

* *These courses are available as separate [open enrollment workshops](#).*

Registration and Fee Information

Space is quite limited in this program and enrollments will be accepted based on the date of application and prior experience with microcomputers. ***The fee for this 160+-hour program is \$4,995***

This is an all-inclusive fee and includes all required textbooks, a tool kit and the test vouchers for four exams; the CompTIA Essentials exam, and one CompTIA A+ Job-role exam, and the two Microsoft Windows MCDST exams.

- **Participants who enroll and pay in full at least one week prior to the start date will save \$500 and pay a reduced fee of only \$4,495 for the entire 160+-hour program.**
- **A deposit of \$1,095 is required one week prior to the class start date with three additional equal payments toward the remaining balance due at the beginning of each of the next three months.**
- **Early application is strongly recommended since this course usually fills up months before the start date.**
- ***Bonus* - Students who complete this program are entitled to a 20% discount on any CBT courses that they enroll in for a period of one year after program completion.**

Refund Schedule: 100% of program fee, less a \$50 administrative charge, for withdrawal completed **at least one week prior to class start date**. No refund is available after that date

For more information please call or Email CBT directly

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Springfield Technical Community College
Center for Business and Technology
PC/Network Technician Certification Program
Tentative Schedule for Spring 2010

| Course | Dates | Time/Location 2/411 (unless noted) | Total hours |
|---|--|--|------------------------|
| Free Information Session | Tuesday, January 5 th | 5:00p.m. – 6:15p.m. (2/303) | |
| A+/Network Tech Program Kick-off Session | Tuesday, January 19 th | 5:00 – 7:30p.m. (2/303) | 2.5 |
| Introduction to Operating Systems and Hardware | Saturday, January 23, 30 January 25, February 1 Saturday, February 6 | 8:00-12:00pm 5:00 - 9:00 p.m. 8:00 a.m. - 5:00 p.m. | 24 |
| Basic Computer Maintenance (Labs Included) | February 8, 10, 17, 22, 24 Saturday, February 20 March 1 | 5:00-9:00 p.m. 8:30a.m. – 12:30 p.m. 5:00-9:00 p.m. | 28 |
| Advanced Hardware w/labs | March 3, 8, 10, 15, (18-Thursday) Saturday, March 13 | 5:00-9:00 p.m. 8:30a.m. – 12:30 p.m. | 24 |
| Introduction to Linux | March 23 | 5:00- 9:00 p.m. (2/303) | 4 |
| Printing Fundamentals & Preventive Maintenance | March 24 | 5:00-9:00 p.m. | 4 |
| Introduction to Networks: | Saturday, March 27 | 8:00-5:00p.m. (2/303) | 8 |
| PC/Network Protection: Viruses & Spyware | March 29 | 5:00-9:00 p.m. | 4 |
| Resume Writing and Interviewing Skills | Tuesday, March 30 | 5:00 – 9:00pm (2/701) | 4 |
| Hardware Exam Review | March 31 | 5:00-9:00 p.m. | 4 |
| Advanced LAN (TCP/IP) | April 5 | 5:00-9:00 p.m. (2/303) | 4 |
| Microsoft Certified Desktop Support Tech (MCDST) | April 7, 12, 14, 21, 26, 28 Saturday, April 10 Saturday, April 24 | 5:00 - 9:00 p.m. (2/303) 8:00a.m. – 12:00 p.m. 8:00am – 5:00pm | 36 |
| A+ OS Technologies Prep | May 3, 5 | 5:00-9:00 p.m. (2/303) | 8 |
| MCDST & Network Reviews | Saturday, May 10, 12 | 8:00a.m. – 5:00p.m. (2/303) | 8 |
| Certification Exams | <i>You will need to pass 2 exams for each Certification</i> | | |
| Wrap-up (Pizza is on us) | Monday, May 24 | 5:00 - 7:00 p.m. (2/7 th Floor) | 2 |