



## **A+ and Desktop Service Technician Certification Online - IT101 240 hours**

### **In the A+ and Desktop Service Technician program, students will:**

- ✓ Use best practices and standards in Installation, configuration, and troubleshooting of networks, quality of service, virtual private networks, and broadband technologies for enterprise organizations, as an A+ Technician.
- ✓ Successfully troubleshoot desktop environments and support end users that are running the Windows XP operating system, as a Microsoft Certified Desktop Support Technician (MCDST).

### **A+ Essentials Test 220-601:**

#### **Personal Computer Components**

##### **Overview/Description**

To understand the names and purposes of, and how to install, configure, remove, and troubleshoot personal computer components

##### **Target Audience**

The audience for this path includes entry-level computer technicians who will, by the end of studying this path and before taking the exam, have accumulated 500 hours hand-on experience in a lab or in the field

##### **Prerequisites**

None

- Identify the features of storage devices, power supplies, and display devices
- Identify the features of motherboards
- Recognize the features of processors
- Recognize the features of memory, ports and cables, adapter cards, and input devices
- Recognize personal computer components and their purposes
- Install, configure, optimize, and upgrade personal computer components
- Identify troubleshooting and preventive maintenance techniques for personal computer components
- Perform basic troubleshooting on personal computer components in a given scenario
- Isolate and solve problems with PC components

#### **Laptop Components, Peripherals, and Networks**

##### **Overview/Description**

To understand the basic concepts of, and how to troubleshoot problems with, laptops, peripherals and networks connections

##### **Target Audience**

The audience for this path includes entry-level computer technicians who will, by the end of studying this path and before taking the exam, have accumulated 500 hours hand-on experience in a lab or in the field



### **Prerequisites**

None

Identify the features of laptop components, how to remove laptop hardware safely, and how to configure power management

- Recognize basic troubleshooting techniques and preventive maintenance for laptops and portable devices
- Recognize how to perform laptop-specific tasks in given scenarios
- Recognize the features of printers and scanners
- Recognize how to install, configure, and troubleshoot printers and scanners
- Recognize printer technologies and how to perform basic printer installation, configuration, and troubleshooting tasks
- Identify basic networking concepts
- Identify the characteristics of common network cables, connectors, and networking technologies
- Install and configure a network and identify network diagnostic and troubleshooting tools
- Determine how to configure and troubleshoot a wireless network connection on a laptop

### **Operating Systems**

#### **Overview/Description**

To recognize the fundamentals of operating system technologies and the basic procedures involved in installing and upgrading operating systems

#### **Target Audience**

The audience for this path includes entry-level computer technicians who will, by the end of studying this path and before taking the exam, have accumulated 500 hours hand-on experience in a lab or in the field

### **Prerequisites**

None

Recognize the differences between operating systems and the basic features of the Windows OS components and system interfaces

- Recognize the names and purposes of operating system files and the basics of disk, file, and directory management
- Identify the location and function of Windows XP system files, navigate the Windows XP interface, and create files and folders
- Recognize how to install, configure, and optimize operating systems in a given scenario
- Recognize how to upgrade operating systems and install a device in a given scenario
- Identify tools, diagnostic procedures, and troubleshooting techniques for operating systems in given scenarios
- Recognize common error messages, codes, operational issues, and preventive maintenance techniques for operating systems in given scenarios
- Troubleshoot operating systems in a given scenario



## **Security, Safety, and Communication**

### **Overview/Description**

To understand the role of security in an organization, the importance of following safety and environmental guidelines, and how to communicate with customers in a professional manner

### **Target Audience**

The audience for this path includes entry-level computer technicians who will, by the end of studying this path and before taking the exam, have accumulated 500 hours hand-on experience in a lab or in the field

### **Prerequisites**

None

Identify the fundamental principles of security

- Identify the features of data and physical security, incident reporting, and social engineering situations
- Install hardware, software, and data security and identify troubleshooting and preventive maintenance techniques for computer security in given scenarios
- Implement a security policy, install hardware security, and troubleshoot security issues
- Identify safety and environmental measures and procedures
- Recognize how to communicate clearly and respond professionally to customers in given scenarios
- Recognize guidelines for promoting safety and environmental issues, effective communication skills, and job-related professional behavior

## **A+ IT Technician Test 220-602:**

### **Installing, Configuring, and Troubleshooting PC Components**

#### **Overview/Description**

To recognize how to install, configure and troubleshoot PC components

#### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the A+ Essentials exam (220-601).

#### **Prerequisites**

None

#### **Objectives :**

##### **Installing, Configuring, and Troubleshooting PC Components**

- Recognize how to select and install internal components in given scenarios.
- Recognize how to select, install, and configure display and input devices and adapter cards in given scenarios.
- Install and configure PC components in given scenarios.
- Identify tools, diagnostic procedures, and troubleshooting techniques for personal computer components in given scenarios.



- Identify which tool to use and which steps to take when troubleshooting PC components in given scenarios.
- Recognize common preventive maintenance techniques for personal computer components.
- Troubleshoot operational problems in a given scenario.

## **Working with Laptops and Portable Devices**

### **Overview/Description**

To understand the features of laptops and portable devices, including major components, communication methods, and peripherals

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the A+ Essentials exam (220-601).

### **Prerequisites**

None

### **Objectives :**

#### **Working with Laptops and Portable Devices**

- Identify the major components of the LCD and recognize laptop-specific communication connections, power, and electrical input devices.
- Recognize how to remove laptop-specific hardware and identify how video sharing affects memory.
- Recognize how to use procedures and techniques to diagnose power conditions, video, keyboard, pointer and wireless card issues in given scenarios.
- Troubleshoot laptop issues in a given scenario.

## **Understanding and Maintaining Networks**

### **Overview/Description**

To understand the principles of networking and basic diagnostic and troubleshooting techniques

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the Essentials exam (220-601).

### **Prerequisites**

None

### **Objectives:**

#### **Understanding and Maintaining Networks**

- Recognize the characteristics of networking and Internet protocols.
- Identify characteristics of technologies for establishing network connectivity.
- Recognize networking protocols and technologies for establishing connectivity in given scenarios.
- Install and configure a browser and establish a network connection in a given scenario.



- Recognize how to share network resources in a given scenario.
- Recognize the tools and diagnostic procedures for troubleshooting network problems.
- Recognize how to perform preventative maintenance of networks, including securing and protecting network cabling.
- Configure and troubleshoot a network connection in a given scenario.

## **Maintaining Operating Systems**

### **Overview/Description**

To understand how to manage and optimize operating systems

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the A+ Essentials exam (220-601)

### **Prerequisites**

None

### **Objectives :**

## **Maintaining Operating Systems**

- Identify the function of commandline functions and utilities for managing operating systems.
- Recognize how to create, view, and manage disks, directories, and files on operating systems.
- Locate and use operating system utilities in given scenarios.
- Recognize procedures and utilities for optimizing operating systems in given scenarios.
- Manage and optimize an operating system in given scenarios.
- Recognize how to use diagnostic and recovery tools for operating systems.
- Recognize howto resolve common operational errors in given scenarios.
- Identify the preventive maintenance measures for operating systems.
- Resolve operational problems in a given scenario.

## **Installing and Troubleshooting Printers and Scanners**

### **Overview/Description**

To recognize how to install and troubleshoot printers and scanners

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the Essentials exam (220-601).

### **Prerequisites**

None

### **Objectives :**



## **Installing and Troubleshooting Printers and Scanners**

- Recognize the processes used by printers and scanners.
- Install, configure, and optimize printers and scanners in given scenarios.
- Install and optimize a printer in a given scenario.
- Identify the symptoms common printer problems and the tools and procedures for troubleshooting printers and scanners.
- Troubleshoot laser printers in a given scenario.
- Identify preventive maintenance measures for printers and scanners.

## **Managing IT Security**

### **Overview/Description**

To understand basic security principles and security software and how to troubleshoot security issues

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the A+ Essentials exam (220-601).

### **Prerequisites**

None

### **Objectives:**

#### **Managing IT Security**

- Identify the characteristics of access control, auditing, and event logging.
- Install and configure security in given scenarios.
- Install and configure software and data security in given scenarios.
- Recognize how to diagnose and troubleshoot software and data security issues in given scenarios.
- Troubleshoot a firewall and a shared folder in a given scenario.
- Identify how to prevent social engineering situations.

## **Recognizing Safety Procedures, Effective Communication, and Professional Behavior**

### **Overview/Description**

To recognize the importance of workplace safety and professional workplace behavior

### **Target Audience**

The audience for this path includes computer technicians who have accumulated 500 hours hand-on experience in a lab or in the field and, ideally, have completed the A+ Essentials exam (220-601)

### **Prerequisites**

None

### **Objectives :**



## **Recognizing Safety Procedures, Effective Communication, and Professional Behavior**

- Recognize potential hazards and how to overcome them with proper safety procedures.
- Recognize guidelines for effective communication in given scenarios.
- Recognize how to respond to given workplace scenarios in a professional manner.
- Recognize proper safety procedures, how to communicate effectively with customers, and how to use job-related professional behavior in given scenarios.

### **A+ Remote Support Technician Test 220-603:**

The CompTIA A+ 220-603 examination is targeted for individuals who work or intend to work in a remote-based work environment where client interaction, client training, operating system and connectivity issues are emphasized. Example job roles include: Remote Support Technician, Help Desk Technician, and Call Center Technician. Ideally, the CompTIA A+ 220-603 candidate has already passed the CompTIA A+ Essentials examination. Candidates who pass both CompTIA A+ Essentials and exam 220-603 exams will be CompTIA A+ certified with the Remote Support Technician designation.

### **A+ Depot Technician Test 220-604:**

The CompTIA A+ 220-604 examination is targeted for individuals who work or intend to work in settings where hardware related activities are emphasized. Example job roles include: Depot Technician, Bench technician. Ideally, the CompTIA A+ 220-604 candidate has already passed the CompTIA A+ Essentials examination. Candidates who pass both CompTIA A+ Essentials and exam 220-604 exams will be CompTIA A+ certified with the Depot Technician designation.

## **MCDST CERTIFICATION**

The Microsoft Certified Desktop Support Technician credential is the premier certification for IT professionals who support end users and troubleshoot desktop environments running on the Microsoft Windows operating system. This online certification preparation program will prepare students to sit for the national certification exam to become a Microsoft Certified Desktop Support Technician. MCDSTs are employed as Help Desk Technicians, Customer Support Representatives, PC Support Specialists, Technical Support Representative, Technical Support Specialist, among others! MCDSTs are not expected to possess network administration skills.

Successfully troubleshoot desktop environments and support end users that are running the Windows XP operating system, as a Microsoft Certified Desktop Support Technician (MCDST).

MCDST candidates are required to pass two core exams. Elective exams are not required.

### **[Exam 70-271: Supporting Users and Troubleshooting a Microsoft Windows XP Operating System](#)**

This course provides students with the knowledge to:

- Perform and troubleshoot installation or upgrade
- Configure and troubleshoot hardware—such as print, display, and I/O devices
- Manage access to files, folders, and add-on software
- Configure the desktop and user environment



- Apply security and privacy settings, and local policy
- Resolve network connectivity issues—both local and remote
- Optimize system performance

**[Exam 70-272: Supporting Users and Troubleshooting Desktop Applications on a Microsoft Windows XP Operating System](#)**

This course provides students with the knowledge to:

- Configure, customize, and support Microsoft Office applications, including Microsoft Office Outlook
- Configure and support Microsoft Internet Explorer, including Pop-up Blocker and other new features
- Troubleshoot usability, customization, and connectivity issues
- Manage application security permissions and settings
- Set up and troubleshoot Windows Firewall and monitor antivirus software