



A+ Essential+ IT Technician

خلاصه A+ Essentials:

CompTIA A+ certification validates the latest skills needed by computer support professionals, and confirms a technician's ability to perform tasks such as installation, configuration, diagnosing, preventive maintenance and basic networking.

خلاصه IT Technician:

In this course, students will learn how to support PC hardware in a business setting, including installation, troubleshooting, and component replacement. The target student for this course is responsible for maintaining PCs in their workplace.

طول دوره: ۴۰ ساعت

پیش نیاز: مبانی IT، ویندوز و اینترنت (معادل گذراندن سه مهارت ICDL)

مخاطبین:

The target student is anyone with basic computer user skills who is interested in obtaining a job as an IT professional or PC technician. Possible job environments include mobile or corporate settings with a high level of face-to face client interaction, work environments where client interaction, client training, operating systems, remote-based and connectivity issues are emphasized, or settings with limited customer interaction where hardware activities are emphasized. In addition, this course will help prepare students to achieve a CompTIA A+ Certification.

اهداف دوره:

- ۱- معرفی نقش قطعات سخت افزاری مختلف در یک کامپیوتر و نصب و تنظیمات آنها
- ۲- عیب یابی مشکلات سخت افزاری کامپیوتر و طریقه برطرف کردن آنها
- ۳- معرفی تکنولوژی سیستم عامل و تنظیم سیستم عامل Windows XP Professional و عیب یابی آن
- ۴- آشنایی با مفاهیم، اجزا و توپولوژی شبکه در مد نیاز برای یک تکنسین سخت افزار

Lesson 1: Personal Computer Components

The following concepts are covered in this lesson:

Hardware components

Storage Devices

Computer Connections

Lesson 2: Operating System Fundamentals

The following concepts are covered in this lesson:

Directory and file management

System Management

Boot Processes

System Monitoring and Management

System Troubleshooting

Lesson 3: PC Technician Professional Best Practices

The following concepts are covered in this lesson:

Electricity

Understanding Static Electricity

Power supplies

Safety with computers

Tools and software for safety

Lesson 4: Installing and Configuring Peripheral Components

The following concepts are covered in this lesson:

Display Devices

Install and configure I/O Devices

Adapter Cards

Multimedia Devices

Lesson 5: Installing and Configuring System Components

The following concepts are covered in this lesson:

Installing Storage Devices

Power supplies

Memory

System BIOS and CMOS

Understanding the POST process

Lesson 6: Troubleshooting System Components

The following concepts are covered in this lesson:

- Troubleshooting Storage Devices
- Trouble shooting Power Supplies
- Troubleshooting Memory
- Troubleshooting CPUs and System Boards

Lesson 7: Installing and Configuring Operating Systems

The following concepts are covered in this lesson:

- Install Microsoft Windows
- Upgrade Microsoft Windows
- Optimizing Windows

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Outline:

Lesson 1: IT Technician Professional Best Practices

- Tools of the Trade
- Safety and Environmental Issues
- Professionalism and Communication

Lesson 2: Installing and Configuring Personal Computer Components

- Install and Configure System Boards
- Install and Configure Memory
- Install and Configure Storage Devices
- Install and Configure CPUs
- Install and Configure Power Supplies
- Install and Configure Cooling Systems
- Install and Configure Adapter Cards
- Install and Configure Display Devices
- Install and Configure Input Devices
- Install and Configure Multimedia Devices

Lesson 3: Maintaining and Troubleshooting Personal Computer Components

- Maintain Personal Computer Components
- Troubleshoot Processors and System Boards
- Troubleshoot Memory
- Troubleshoot Storage Devices
- Troubleshoot Power Supplies

- Troubleshoot Adapter Cards
- Troubleshoot Display Devices
- Troubleshoot Input Devices
- Troubleshoot Multimedia Devices
- Troubleshoot Other Peripheral Devices

Lesson 4: Maintaining and Troubleshooting Operating Systems

- Maintain Operating Systems
- Troubleshoot Operating Systems
- Recover Operating Systems

Lesson 5: Installing, Maintaining, and Troubleshooting Printers and Scanners

- Install and Configure Printers and Scanners
- Maintain Printers and Scanners
- Troubleshoot Printers and Scanners

Lesson 6: Networking Technologies

- Network Protocols
- Internet Technologies
- Network Connection Technologies

Lesson 7: Installing and Managing Network Components

- Install and Configure Web Browsers
- Create Network Connections
- Configure Network Resource Sharing
- Maintain and Troubleshoot Networks

Lesson 8: Maintain and Troubleshoot Computer Security

- Security Principles
- Install and Configure Security Measures
- Maintain and Troubleshoot Security