



A+ Essential + IT Technician

فلاصه : 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.

فلاصه : 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:

۵۰ ساعت

پیش نیاز:

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

مفاهیم:

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, remote-based work environments where client interaction, client training, operating systems, 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 نصب 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

سرفصل دوره:

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

A+ IT Technician

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: Installing and Troubleshooting Laptops and Portable Devices

- Install and Configure Laptops
- Troubleshoot Laptops and Portable Devices

Lesson 5: Installing, Managing, and Optimizing Operating Systems

- Install and Upgrade Operating Systems
- Operating System Management Utilities
- Manage Disks and File Systems
- Optimize Operating Systems

Lesson 6: Maintaining and Troubleshooting Operating Systems

- Maintain Operating Systems
- Troubleshoot Operating Systems

Recover Operating Systems

Lesson 7: Installing, Maintaining, and Troubleshooting Printers and Scanners

Install and Configure Printers and Scanners

Maintain Printers and Scanners

Troubleshoot Printers and Scanners

Lesson 8: Networking Technologies

Network Protocols

Internet Technologies

Network Connection Technologies

Lesson 9: Installing and Managing Network Components

Install and Configure Web Browsers

Create Network Connections

Configure Network Resource Sharing

Maintain and Troubleshoot Networks

Lesson 10: Maintain and Troubleshoot Computer Security

Security Principles

Install and Configure Security Measures

Maintain and Troubleshoot Security