

IT Fundamentals Pro (V2)

Competency Assessment Objectives

Hardware

Internal Components

- Explore motherboard components.
- Install motherboard components.
- Troubleshoot components.
- Clear CMOS settings.

Input & Output

- Connect proper cables to a computer system.
- Connect peripherals to a computer system.

Storage

- Install storage media into a computer.
- Create volumes and format drives.
- Perform Disk Maintenance.
- Troubleshoot System Power.

Software

Applications

- Pin and unpin applications to the Start Menu and taskbar.
- Use Microsoft Word to open, modify and save a document.
- Use Microsoft PowerPoint to open, modify and run a slide show.
- Use Microsoft Excel Tables and Charts to analyze data.
- Troubleshoot applications.

Printing

- Open and print a document from Microsoft Word.
- Configure local and network printing.

Application Delivery

- Configure a Windows system for automatic updates.
- Use Windows Task Manager to manage application startup.

Operating Systems

System Software

- Change display settings in Windows.
- Use Windows Device Manager to update drivers.
- Update and manage BIOS/UEFI settings.
- Explore operating systems.

File Management

- Manage files and folders in the Windows file system.
- Manage file and NTFS permissions.
- Use command line utilities.
- Create a virtual machine.

Networking

Internet Technologies

- Use Microsoft Outlook to respond to email.
- Configure browser privacy and security features.
- Copy files from the local Windows file system to OneDrive.
- Configure and manage smart devices.
- Enable and use a Proxy Server.

- Clear browser cache.

Network Configuration

- Use a cable modem to connect to the Internet.
- Connect to, configure, and use a secure wireless network.
- Troubleshoot network connections.
- Install, configure, and manage a network connection.
- Manage mobile and Bluetooth devices.
- Configure and manage a VPN connection.

Databases

Database Access

- Use Microsoft Access to explore database objects.
- Use Microsoft Access Reports to Analyze Data.
- Create database tables using Microsoft Access.
- Create table relationships using Microsoft Access.

Database Queries

- Use Microsoft Access to perform basic queries.
- Write SQL commands to retrieve all data from a table.
- Write SQL commands to retrieve data matching criteria.
- Write SQL commands to add and delete records.

Programming

Programming Fundamentals

- Use JavaScript to create an If... Else statement.
- Use JavaScript to define and call a function.
- Use JavaScript to create for loop and a while loop.

Web Development

- Use HTML tags for head, body, ordered list, and unordered list.
- Use HTML to add headings, images, and hyperlinks to a web page.
- Use HTML to Link a CSS file to an HTML page.
- Create CSS Style sheets to add a drop shadow to an element.
- Create CSS style sheets to resize an image and change a font.
- Use JavaScript to add functionality to a button on a web page.

Security

Device Security

- Configure Windows Defender to protect your home computer.
- Configure Windows Firewall for different networks.
- Secure a home wireless network.
- Configure remote wipe on a device.
- Install and configure a UPS.

Corporate Data Security

- Configure Windows backup settings.
- Configure access control and authentication.
- Configure File Encryption.
- Configure and restore data using File History.
- Evaluate possible social engineering exploits.