

<b>Programme Title</b>	Certificate: PC Technician
<b>Duration</b>	±6 months
<b>Admission Requirements</b>	English Proficiency Basic Computer Skills
<b>Programme type</b>	Available in Full time and Part time

## Objectives

### Essentials: Exam Number: 220-901

#### Subject 1: PC Hardware

- Configure and apply BIOS settings.
- Differentiate between motherboard components, their purposes, and properties.
- Compare and contrast RAM types and features.
- Install and configure expansion cards.
- Install and configure storage devices and use appropriate media.
- Differentiate among various CPU types and features and select the appropriate cooling method.
- Compare and contrast various connection interfaces and explain their purpose.
- Install an appropriate power supply based on a given scenario.
- Evaluate and select appropriate components for a custom configuration, to meet customer specifications or needs.
- Given scenario, evaluate types and features of display devices.
- Identify connector types and associated cables.
- Install and configure various peripheral devices.

#### Subject 2: Networking

- Identify types of network cables and connectors.
- Categorize characteristics of connectors and cabling.
- Explain properties and characteristics of TCP/IP.
- Explain common TCP and UDP ports, protocols, and their purpose.
- Compare and contrast wireless networking standards and encryption types.
- Install, configure, and deploy a SOHO wireless/wired router using appropriate settings.
- Compare and contrast Internet connection types and features.
- Identify various types of networks.
- Compare and contrast network devices their functions and features.
- Given a scenario, use appropriate networking tools.

#### Subject 3: Laptop

- Install and configure laptop hardware and components.
- Compare and contrast the components within the display of a laptop.
- Compare and contrast laptop features.

#### Subject: 4: Printers

- Explain the differences between the various printer types and summarize the associated imaging process.
- Given scenario, install, and configure printers.
- Given scenario, perform printer maintenance.

#### Subject 5: Operational Procedures

- Given a scenario, use appropriate safety procedures.
- Explain environmental impacts and the purpose of environmental controls.
- Given a scenario, demonstrate proper

communication and professionalism.

- Explain the fundamentals of dealing with prohibited content/activity.

### Essentials: Exam Number: 220-902

#### Subject 1: Operating Systems

- Compare and contrast the features and requirements of various Microsoft Operating Systems.
- Given a scenario, install, and configure the operating system using the most appropriate method.
- Given a scenario, use appropriate command line tools.
- Given a scenario, use appropriate operating system features and tools.
- Given a scenario, use Control Panel utilities.
- Setup and configure Windows networking on a client/desktop.
- Perform preventive maintenance procedures using appropriate tools.
- Explain the differences among basic OS security settings.
- Explain the basic of client-side virtualization.

#### Subject 2: Security

- Apply and use common prevention methods.
- Compare and contrast common security threats.
- Implement security best practices to secure a workstation.
- Given a scenario, use the appropriate data destruction/disposal method.
- Given a scenario, secure a SOHO wireless network.
- Given a scenario, secure SOHO wired network.

#### Subject 3: Mobile Devices

- Explain the basic features of mobile operating systems.
- Establish basic network connectivity and configure email.
- Compare and contrast methods for securing mobile devices.
- Compare and contrast hardware differences in regards to tablets and laptops.
- Execute and configure mobile device synchronization.

#### Subject: 4: Troubleshooting

- Given a scenario, explain the troubleshooting theory.
- Given a scenario, troubleshoot common problems related to motherboards, RAM, CPU and power with appropriate tools.
- Given scenario, troubleshoot hard drives and RAID arrays with appropriate tools.
- Given a scenario, troubleshoot common video and display issues.
- Given a scenario, troubleshoot wired and wireless networks with appropriate tools.
- Given a scenario, troubleshoot operating system problems with appropriate tools.
- Given a scenario, troubleshoot common security issues with appropriate tools and best practices.
- Given a scenario, troubleshoot, and repair common laptop issues while adhering to the appropriate procedures.
- Given a scenario, troubleshoot printers with appropriate tools

## Certification upon successful completion

- PC Technician Certificate
- Optional: CompTIA Certificate A+ on successful completion of CompTIA exams

