

## ITF+

### **Module 1 Using Computers**

#### **Unit 1: Common**

- Computing Devices
- Information Technology
- Personal Computers (PC)
- Mobile and IoT Devices

#### **Unit 2: Using a**

- Workstation
- Setting up a PC System
- Ergonomic Concepts
- Navigating an OS
- Using Input Devices
- Icons and Windows

#### **Unit 3: Using an OS**

- Functions of an Operating System
- Types of Operating System
- Virtualization
- Microsoft Windows
- Apple macOS and iOS
- Linux, Chrome, and Android
- File Explorer
- Windows Settings and Control Panel
- Using a Web Browser

#### **Unit 4: Managing an OS**

- Management Interfaces
- Process and Service Management
- Memory and Disk Management
- Command Line Interfaces
- Access Control and Protection

#### **Unit 5: Troubleshooting and Support**

- Support and Troubleshooting
- Identifying the Problem
- Understanding the Problem
- Resolving and Documenting the Problem
- Developing a Troubleshooting Approach
- Troubleshooting PC Issues
- Getting Support
- Using a Search Engine

## **Module 2**

### **Using Apps and Databases**

#### **Unit 1: Using Data Types and Units**

- Notational Systems
- Units of Measure
- Data Types
- Data Representation
- The Value of Data
- Intellectual Property
- Data-driven Business Decisions

#### **Unit 2: Using Apps**

- Installing Applications
- Application Management
- Managing Software Licensing
- Productivity Software
- Collaboration Software
- Business Software

#### **Unit 3: Programming and App Development**

- Programming Logic
- Programming Languages
- Programming Concepts
- Object-Oriented Programming
- Scripting Languages
- Application Platforms and Delivery

#### **Unit 4: Using Databases**

- Database Concepts
- Database Structures
- Relational Methods
- Database Access Methods
- Application Architecture Models

### **Module 3**

#### **Using Computer Hardware**

##### **Unit 1: System Components**

- Selecting a Computer
- Motherboard Components
- Processors
- Features of Processors
- Expansion Bus
- System Cooling
- BIOS and UEFI System Firmware

##### **Unit 2: Using Device Interfaces**

- Computer Connector Types
- USB and Firewire
- Graphic Devices
- Graphic Device Interfaces
- Input Devices
- Configuring Peripherals
- Bluetooth and NFC
- Networking Interfaces

##### **Unit 3: Using Peripheral Devices**

- Installing and Uninstalling
- Peripherals
- Display Devices
- Display Settings
- Multimedia Ports and Devices
- Printer Types
- Installing and Configuring a Printer
- Scanners and Cameras

## **Unit 4: Using Storage Devices**

- System Memory
- Mass Storage Devices
- Optical Discs and Drives
- Flash Memory Devices

## **Unit 5: Using File Systems**

- Managing the File System
- Folders and Directories
- File Explorer
- Files
- File Attributes and Permissions
- Searching for Folders and Files
- File Types and Extensions

## **Module 4**

### **Using Networks**

#### **Unit 1: Networking Concepts**

- Network Components
- TCP/IP
- Internet Protocol
- Address Resolution Protocol
- DNS and URLs
- Internet Application Services

#### **Unit 2: Connecting to a Network**

- Internet Service Types
- Wireless Internet Services
- Setting Up a Wireless Network
- Configuring a Wireless Client

#### **Unit 3: Secure Web Browsing**

- Safe Browsing Practices
- Configuring Browser Security
- Managing Cookies and PII
- Digital Certificates and Antiphishing

- Enabling a Firewall

#### **Unit 4: Using Shared Storage**

- Local Sharing and Storage
- Windows File Sharing
- Hosted Sharing and Storage Backups
- Windows Backup

#### **Unit 5: Using Mobile Devices**

- Using a Mobile Device
- Mobile Applications and App Stores
- Network Connectivity
- Email Configuration
- Synchronization and Data Transfer

### **Module 5**

#### **Security Concepts**

##### **Unit 1: Security Concerns**

- Computer Security Basics
- Social Engineering
- Business Continuity
- Disaster Recovery

##### **Unit 2: Using Best Practices**

- Securing Devices Malware
- Preventing Malware Infections Spam
- Software Sources and Patch Management

##### **Unit 3: Using Access Controls**

- Access Controls
- User Account Types
- Authentication Factors
- Uses of Encryption
- Password Cracking and Management

##### **Unit 4: Behavioral Security Concepts**

- Policies and Procedures
- Handling Confidential Information

- Acceptable Use Policies
- Expectations of Privacy
- Taking the Exam
- Career Advice
- Glossary