

CompTIA IT Fundamentals (ITF+) (Exam FC0-U61)

Duration: 5 Days

Prerequisites:

There are no special prerequisites to start this course. We have made the assumption that you don't know much about how computers or software work, or even how to use them. Some experience with using a keyboard and mouse will be helpful but is not essential.

Course Description:

This course and the ITF+ certification is designed as the starting point for a career in IT support. Obtaining ITF+ certification will show that you have the aptitude to pursue a professional-level certification, such as CompTIA A+. Completing this course will also help you acquire the knowledge and skills to set up and use a computer at home securely and keep it in good working order, and to provide informal support for PCs and simple computer networks to your colleagues in a small business. On course completion, you will be able to:

- Set up a computer workstation and use basic software applications.
- Explain the functions and types of devices used within a computer system
- Apply basic computer maintenance and support principles.
- Describe some principles of software and database development.
- Configure computers and mobile devices to connect to home networks and to the Internet.
- Identify security issues affecting the use of computers and networks.

Target Audience:

CompTIA ITF+ is aimed at those considering a career in IT and computer related fields.

Course Outlines:

Module 1 / Unit 1 Common Computing Devices

- Information Technology
- Personal Computers (PC)
- Mobile Devices
- > Internet of Things (IoT) Devices

Module 1 / Unit 2 Using a Workstation

- Setting up a PC System
- Ergonomic Concepts
- Navigating an OS
- Using Input Devices
- Recognizing Desktop Icons
- Working with Windows

Module 1 / 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

Module 1 / Unit 4 Managing an OS

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

Module 1 / Unit 5 Troubleshooting and Support

- Support and Troubleshooting
- Identifying the Problem
- Understanding the Problem
- Resolving and Documenting the Problem
- 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

Module 2 / Unit 2 Using Apps

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

Module 2 / Unit 3 Programming and App Development

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

Module 2 / Unit 4 Using Databases

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

Module 3 / Unit 1 System Components

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

COURSE OUTLINE



Module 3 / Unit 2 Using Device Interfaces

- Computer Port and Connector Types
- USB and Firewire
- Graphics Devices
- Graphic Device Interfaces
- Input Devices
- Configuring Peripherals
- Bluetooth
- RF and Near Field Communications (NFC)
- Networking Interfaces

Module 3 / 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

Module 3 / Unit 4 Using Storage Devices

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

Module 3 / 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
- Packet Delivery and Forwarding
- DNS and URLs
- Internet Application Services

Module 4 / Unit 2 Connecting to a Network

- Internet Service Types
- Wireless Internet Services
- > Setting Up a Wireless Network
- Configuring a Wireless Client
- Connecting to an Enterprise Network

Module 4 / Unit 3 Secure Web Browsing

- Safe Browsing Practices
- Configuring Browser Security
- Managing Cookies and PII
- Digital Certificates and Anti-phishing
- Enabling a Firewall

Module 4 / Unit 4 Using Shared Storage

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

Module 4 / 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

Module 5 / Unit 2 Using Best Practices

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

Module 5 / Unit 3 Using Access Controls

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

Module 5 / Unit 4 Behavioral Security Concepts

- Policies and Procedures
- Handling Confidential Information
- Acceptable Use Policies
- Expectations of Privacy