



Official CompTIA learning resources

CompTIA ITF+

OVERVIEW

The Official CompTIA IT Fundamentals (ITF+) (Exam FCO-U61) will provide students with the fundamental IT skills and concepts required to identify and explain the basics of computing, IT infrastructure, software development, and database use. In addition, students will acquire the essential skills and information they need to set up, configure, maintain, troubleshoot, and perform preventative maintenance of the hardware and software components of a basic personal computer workstation and basic wireless devices. Students will also learn to implement basic security measures and implement basic computer and user support practices as well as prepare candidates to take the CompTIA IT Fundamentals (ITF+) certification exam.

WHO WOULD BENEFIT

- Students considering a career in IT
- Students and career changers considering a career in IT
- Marketing, sales and operations staff in IT-based organizations

COURSE CONTENT SUMMARY

Module 1

Using Computers

Module 1 / Unit 1: Common

Computing Devices

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

Module 1 / Unit 2: Using a Workstation

- Setting up a PC System
- Ergonomic Concepts
- Navigating an OS
- Using Input Devices
- Icons and 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
- Developing a Troubleshooting Approach
- Troubleshooting PC Issues
- Getting Support
- Using a Search Engine

Module 2

Using Apps and Databases

Module 2 / 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

Using Computer Hardware

Module 3 / Unit 1: System Components

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

Module 3 / 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

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
- 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

Module 4 / Unit 1: Networking Concepts

- Network Components
- TCP/IP
- Internet Protocol
- Address Resolution Protocol
- 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

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 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

Module 5 / 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
- Taking the Exam
- Career Advice
- Glossary