

ITF+: COMPTIA IT FUNDAMENTALS

Course Code: ITF+

Duration: 3 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

In this course, students will identify PC components, work with files and folders, and conduct basic software installations. This course will provide students with the fundamental skills and concepts required to maintain, support, and work efficiently with personal computers.

In addition, it covers the essential skills and information needed 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 implement basic security measures and implement basic computer and user support practices.

SKILLS COVERED

- Identifying and explaining computer components
- Setting up a workstation, including conducting software installations
- Establishing network connectivity
- Identifying compatibility issues and identifying and preventing security risks
- Managing the safety and preventative maintenance of computers

WHO SHOULD ATTEND?

- Entry-level and newly hired technical professionals, including PC support, help desk, and networking professionals
- Sales and marketing professionals looking to increase their ability to

communicate with technical professionals and increase sales

- Executives who seek better-informed decision making
- Professionals seeking to prepare for the CompTIA IT Fundamentals+ Exam

PRE-REQUISITES

There is no pre-requisites for this course.

MODULES

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

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