

KOENIG SOLUTIONS • COURSE OUTLINE

IT Fundamentals+ (ITF+)

Learn to use computers, applications, hardware, networks and security concepts to support everyday IT tasks.

5

MODULES

128

TOPICS

COURSE OVERVIEW

This course covers computing devices, operating systems, workstation setup, and troubleshooting approaches for everyday use. It then addresses applications, data types, programming concepts and database structures before moving to computer hardware, including system components, device interfaces, peripherals, storage and file systems. Networking topics include networking concepts, connecting to and securing networks, shared storage and mobile devices. The course closes with security concerns, best practices, access controls and behavioural security concepts.

WHO THIS COURSE IS FOR

IT Support Technicians

Help Desk Technicians

End Users

Entry-Level IT Professionals

System Administrators

LEARNING OBJECTIVES

- Identify common computing devices and operating system functions
- Navigate and manage an operating system using various interfaces
- Apply troubleshooting approaches to resolve PC issues
- Describe data types, programming concepts and database structures
- Explain application installation, management and software licensing
- Identify computer hardware components, interfaces and peripherals
- Configure network connections, wireless clients and shared storage
- Apply security best practices, access controls and behavioural policies

5 Modules, 128 Topics

01

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

02

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

03

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

04

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

05

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

NOTES

- Taking the Exam
- Career Advice
- Glossary

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

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Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

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