



# **TestOut<sup>®</sup>**

TestOut IT Fundamentals Pro

# COURSE OUTLINE

# TestOut IT Fundamentals Pro Course Outline

📺 Videos: 100 (6:00:46)

🖥️ Demonstrations: 24 (0:37:26)

🔗 Simulations: 24

📄 Fact Sheets: 94

📝 Exams: 35

## CONTENTS:

---

### 0.0 GETTING STARTED

📺 0.1 Introduction to TestOut IT Fundamentals Pro (2:02)

📄 0.2 Course Overview

📄 0.3 Course Objectives

### 1.0 INTRODUCTION TO COMPUTERS

#### 1.1 The Information Age

📺 1.1.1 Introduction to Computers (3:00)

📄 1.1.2 Computer System Facts

📺 1.1.3 History of Computers (3:40)

📄 1.1.4 Computer History Facts

📺 1.1.5 Computing Devices (4:04)

📄 1.1.6 Computing Device Facts

📺 1.1.7 The Internet of Things (2:13)

📄 1.1.8 Internet of Things Facts

📺 1.1.9 Technology and Ethics (3:39)

📄 1.1.10 Technology and Ethics Facts

📄 1.1.11 Activity: Research Computing Devices












📝 1.1.12 Concept Quiz

#### 1.2 How Computers Work











📺 1.2.1 Number Systems (3:48)

📄 1.2.2 Number System Facts












📺 1.2.3 Digital Information (4:45)

-  1.2.4 Digital Information Facts
-  1.2.5 Data Representation (2:24)
-  1.2.6 Data Representation Facts
-  1.2.7 Digital Sound and Video (5:08)
-  1.2.8 Digital Sound and Video Facts
-  1.2.9 Digital Images (3:58)
-  1.2.10 Digital Image Facts
-  1.2.11 File Compression (5:29)
-  1.2.12 File Compression Facts
-  1.2.13 Activity: Compare Digital Media
-  1.2.14 Concept Quiz



### 1.3 Peripheral Devices













-  1.3.1 Input/Output Hardware (4:14)
-  1.3.2 Input/Output Hardware Facts
-  1.3.3 External Device Interfaces (5:13)
-  1.3.4 Installing External Devices (3:05)
-  1.3.5 External Device Facts
-  1.3.6 Connect a Monitor (1:38)
-  1.3.7 Connect a Monitor
-  1.3.8 Install Peripherals (USB Devices) (2:41)
-  1.3.9 Install Peripherals (USB Devices)
-  1.3.10 Concept Quiz

### 1.4 Processing and Storage Hardware











-  1.4.1 Internal Computing Components (3:54)
-  1.4.2 Internal Computing Component Facts
-  1.4.3 Storage Types (2:49)
-  1.4.4 Storage Facts
-  1.4.5 CPU Types (1:33)
-  1.4.6 CPU Facts
-  1.4.7 Troubleshooting (4:37)
-  1.4.8 Troubleshooting Facts
-  1.4.9 Set Up a Computer (3:19)
-  1.4.10 Set Up a Computer
-  1.4.11 Concept Quiz

### 1.5 Operating Systems








-  1.5.1 Introduction to Operating Systems (4:03)
-  1.5.2 OS Interfaces (1:36)





-  1.5.3 Operating System Facts
-  1.5.4 System Software (3:02)
-  1.5.5 System Software Facts
-  1.5.6 Windows Settings (2:56)
-  1.5.7 Windows Settings Facts
-  1.5.8 Update Drivers (1:40)
-  1.5.9 Update Drivers
-  1.5.10 Manage Applications (1:21)
-  1.5.11 Manage Applications
-  1.5.12 Change Windows Settings (0:59)
-  1.5.13 Change Windows Settings
-  1.5.14 Concept Quiz

## 1.6 File Management

-  1.6.1 Files and File Systems (3:50)
-  1.6.2 File System Features (1:56)
-  1.6.3 File System Facts
-  1.6.4 Windows File Management (6:05)
-  1.6.5 Windows File Management Facts
-  1.6.6 Manage Files and Folders (1:40)
-  1.6.7 Manage Files and Folders
-  1.6.8 Assign File Permissions (1:10)
-  1.6.9 Assign File Permissions
-  1.6.10 Concept Quiz















## 1.7 Application Software

-  1.7.1 Productivity Software (2:36)
-  1.7.2 Productivity Software Facts
-  1.7.3 Collaboration Software (3:56)
-  1.7.4 Collaboration Software Facts
-  1.7.5 Business Software (3:37)
-  1.7.6 Business Software Facts
-  1.7.7 Email Etiquette (3:11)
-  1.7.8 Email Etiquette Facts
-  1.7.9 Desktop Applications (3:37)
-  1.7.10 Desktop Application Facts
-  1.7.11 Windows Printing Features (4:29)
-  1.7.12 Windows Printing Facts
-  1.7.13 Use Desktop Applications (1:52)















-  1.7.14 Use Desktop Applications
-  1.7.15 Print a Document (1:13)
-  1.7.16 Print a Document
-  1.7.17 Concept Quiz

## **2.0 NETWORKING**













### **2.1 The Internet**

-  2.1.1 The Internet (3:17)
-  2.1.2 The Web and Other Internet Technologies (4:48)
-  2.1.3 Web and Internet Facts
-  2.1.4 Social Media (4:42)
-  2.1.5 Social Media Facts
-  2.1.6 Cloud Computing (4:57)
-  2.1.7 Cloud Computing Facts
-  2.1.8 Windows Cloud Storage (4:40)
-  2.1.9 Windows Cloud Storage Facts
-  2.1.10 Online Streaming (2:29)
-  2.1.11 Online Streaming Facts
-  2.1.12 Copy Files to OneDrive (0:46)
-  2.1.13 Copy Files to OneDrive
-  2.1.14 Concept Quiz













### **2.2 Web Browsers**

-  2.2.1 Using Web Browsers (5:40)
-  2.2.2 Website Navigation Facts
-  2.2.3 Online Searches (4:14)
-  2.2.4 Online Searching Facts
-  2.2.5 Online Academic Research (5:13)
-  2.2.6 Online Academic Research Facts
-  2.2.7 Configuring Web Browsers (4:33)
-  2.2.8 Web Browser Troubleshooting (2:56)
-  2.2.9 Web Browser Facts
-  2.2.10 Clear Browser Cache (1:15)
-  2.2.11 Clear Browser Cache
-  2.2.12 Configure Browser Settings (1:22)
-  2.2.13 Configure Browser Settings
-  2.2.14 Concept Quiz












### **2.3 Networking Basics**


-  2.3.1 Introduction to Networking (2:08)
-  2.3.2 Basic Networking Facts
-  2.3.3 Network Servers (2:09)
-  2.3.4 Networking Devices and Interfaces (4:00)
-  2.3.5 Networking Device and Interface Facts
-  2.3.6 Internet Service Types (4:33)
-  2.3.7 Internet Service Facts
-  2.3.8 Connect a Cable Modem (2:12)
-  2.3.9 Connect a Cable Modem
-  2.3.10 Set Up an Ethernet Connection (1:15)
-  2.3.11 Set Up an Ethernet Connection
-  2.3.12 Concept Quiz

## 2.4 Networking Standards and Protocols

-  2.4.1 Device Addresses (3:22)
-  2.4.2 Device Address Facts
-  2.4.3 Internet Protocols (5:32)
-  2.4.4 Email Protocols (1:38)
-  2.4.5 Internet Protocol Facts
-  2.4.6 Wireless Standards (3:09)
-  2.4.7 Wireless Standard Facts
-  2.4.8 Careers in Networking (2:10)
-  2.4.9 Networking Career Facts
-  2.4.10 Use a Wireless Network (1:04)
-  2.4.11 Use a Wireless Network
-  2.4.12 Concept Quiz

## 2.5 Application Delivery


-  2.5.1 Application Delivery Methods (4:10)
-  2.5.2 Application Delivery Facts
-  2.5.3 Application Architecture Models (3:12)
-  2.5.4 Application Architecture Facts
-  2.5.5 Platforms and Licensing (5:58)
-  2.5.6 Platform and Licensing Facts
-  2.5.7 Software Installation Best Practices (4:28)
-  2.5.8 Software Installation Facts
-  2.5.9 Windows Update (2:45)
-  2.5.10 Windows Update Facts
-  2.5.11 Configure Windows Update (0:43)


 2.5.12 Configure Windows Update


 2.5.13 Concept Quiz


## **3.0 DATABASES AND PROGRAMMING**


### **3.1 Databases**


 3.1.1 Introduction to Databases (3:42)

 3.1.2 Relational Databases (2:30)


 3.1.3 Database Structure (2:55)

 3.1.4 Relational Database Facts


 3.1.5 Non-relational Databases (2:07)


 3.1.6 Non-relational Database Facts


 3.1.7 Database Management Systems (3:18)


 3.1.8 Database Management System Facts

 3.1.9 Explore an Access Database (1:09)


 3.1.10 Explore an Access Database


 3.1.11 Tables and Relationships (1:37)


 3.1.12 Tables and Relationships

 3.1.13 Concept Quiz


### **3.2 Interfacing with Databases**

 3.2.1 SQL (3:13)

 3.2.2 Relational Methods (2:49)

 3.2.3 SQL Facts


 3.2.4 Database Access Methods (1:31)


 3.2.5 Database Access Facts

 3.2.6 Big Data (4:23)

 3.2.7 Big Data Facts

 3.2.8 Careers with Databases (2:35)


 3.2.9 Database Career Facts


 3.2.10 Create Queries for a School Database (1:19)

 3.2.11 Create Queries for a School Database


 3.2.12 Concept Quiz


### **3.3 Introduction to Programming**

 3.3.1 Introduction to Programming (3:35)

 3.3.2 Programming Languages (4:45)

 3.3.3 Programming Language Facts

 3.3.4 Programming Logic (2:25)

 3.3.5 Programming Logic Facts

- 📖 3.3.6 HTML, CSS, and JavaScript (5:44)
- 📖 3.3.7 HTML, CSS, and JavaScript Facts
- 📖 3.3.8 Activity: JavaScript Introduction
- 📝 3.3.9 Concept Quiz

### **3.4 Programming Terms and Concepts**

- 📖 3.4.1 Fundamental Data Types (1:29)
- 📖 3.4.2 Variables and Arrays (2:57)
- 📖 3.4.3 Functions (3:11)
- 📖 3.4.4 Object-Oriented Programming (3:20)
- 📖 3.4.5 Programming Terminology
- 📖 3.4.6 Careers in Programming (2:17)
- 📖 3.4.7 Programming Career Facts
- 📖 3.4.8 Activity: Basic Python Scripting
- 📝 3.4.9 Concept Quiz

## **4.0 INFORMATION SYSTEMS AND SECURITY**

### **4.1 Information Systems**

- 📖 4.1.1 Introduction to Information Systems (3:15)
- 📖 4.1.2 Types of Information Systems (3:24)
- 📖 4.1.3 Information System Facts
- 📖 4.1.4 Systems Analysis and Design (5:01)
- 📖 4.1.5 Systems Analysis Facts
- 📖 4.1.6 Project Management Facts
- 📖 4.1.7 Activity: Career Exploration
- 📝 4.1.8 Concept Quiz









### **4.2 Data**

- 📖 4.2.1 Data and Information Assets (2:38)
- 📖 4.2.2 Data and Information Facts
- 📖 4.2.3 Copyright and Intellectual Property (5:14)
- 📖 4.2.4 Patents and Trademarks (2:54)
- 📖 4.2.5 Intellectual Property Facts
- 📖 4.2.6 Digital Privacy (3:07)
- 📖 4.2.7 Digital Privacy Facts
- 📖 4.2.8 Activity: Research Privacy Issues
- 📝 4.2.9 Concept Quiz











### **4.3 Threats to Data**

- 📖 4.3.1 Confidentiality Concerns (5:22)


















-  4.3.2 Confidentiality Facts
-  4.3.3 Integrity Concerns (3:08)
-  4.3.4 Integrity Facts
-  4.3.5 Availability Concerns (3:55)
-  4.3.6 Availability Facts
-  4.3.7 Recognize Social Engineering Exploits (3:25)
-  4.3.8 Recognize Social Engineering Exploits
-  4.3.9 Concept Quiz


#### **4.4 Security Concepts**

-  4.4.1 Authentication (3:37)
-  4.4.2 Authentication Facts
-  4.4.3 Authorization (2:35)
-  4.4.4 Authorization Facts
-  4.4.5 Accounting (2:07)
-  4.4.6 Accounting Facts
-  4.4.7 Encryption (3:02)
-  4.4.8 Encryption Facts
-  4.4.9 Activity: Research Information Security
-  4.4.10 Concept Quiz

#### **4.5 Personal Data and Device Security**

-  4.5.1 Password Best Practices (5:52)
-  4.5.2 Password Facts
-  4.5.3 Securing Devices (4:41)
-  4.5.4 Device Security Facts
-  4.5.5 Ecommerce Safeguards (4:54)
-  4.5.6 Ecommerce Facts
-  4.5.7 Windows Defender (4:01)
-  4.5.8 Windows Defender Facts
-  4.5.9 Windows Firewall (5:18)
-  4.5.10 Windows Firewall Facts
-  4.5.11 Use Windows Defender (1:33)
-  4.5.12 Use Windows Defender
-  4.5.13 Configure Windows Firewall (1:02)
-  4.5.14 Configure Windows Firewall
-  4.5.15 Concept Quiz

#### **4.6 Corporate Data Security**

-  4.6.1 Handling Confidential Information (5:02)

- 📖 4.6.2 Confidential Information Facts
- 📖 4.6.3 Fault Tolerance (2:27)
- 📖 4.6.4 Fault Tolerance Facts
- 📖 4.6.5 Backup Considerations (4:39)
- 📖 4.6.6 Backup Facts
- 📖 4.6.7 Disaster Recovery (2:37)
- 📖 4.6.8 Disaster Recovery Facts
- 📖 4.6.9 Careers in Security (1:58)
- 📖 4.6.10 Security Career Facts
- 📖 4.6.11 Use Backup Software (1:11)
- 📖 4.6.12 Use Backup Software
- 📖 4.6.13 Concept Quiz

## **A.0** **COMPTIA IT FUNDAMENTALS (FC0-U61) PRACTICE EXAMS**

### **A.1 Prepare for Certification**

- 📖 A.1.1 CompTIA Exam Objectives

### **A.2 CompTIA ITF Practice Exams (20 Questions)**

- 📖 A.2.1 CompTIA ITF Domain 1: Concepts and Terminology
- 📖 A.2.2 CompTIA ITF Domain 2: Infrastructure
- 📖 A.2.3 CompTIA ITF Domain 3: Applications and Software
- 📖 A.2.4 CompTIA ITF Domain 4: Software Development
- 📖 A.2.5 CompTIA ITF Domain 5: Database Fundamentals
- 📖 A.2.6 CompTIA ITF Domain 6: Security

### **A.3 CompTIA ITF Practice Exams (All Questions)**

- 📖 A.3.1 CompTIA ITF Domain 1: Concepts and Terminology
  - 📖 A.3.2 CompTIA ITF Domain 2: Infrastructure
  - 📖 A.3.3 CompTIA ITF Domain 3: Applications and Software
  - 📖 A.3.4 CompTIA ITF Domain 4: Software Development
  - 📖 A.3.5 CompTIA ITF Domain 5: Database Fundamentals
  - 📖 A.3.6 CompTIA ITF Domain 6: Security
- 📖 A.4 CompTIA ITF Certification Practice Exam