uCertify

Course Outline

IT Fundamentals Associate

17 May 2024

Here's what you get

1. 📖 Course Objective

uCertify's IT Fundamentals Associate course provides a strong foundation in essential IT skills. By immersing themselves in dynamic lessons and hands-on learning, students can grasp key concepts spanning computer hardware, software, programming, databases, cybersecurity, networking, information systems, and beyond. This comprehensive program not only caters to those aspiring for careers in IT but also extends its benefits to individuals in diverse fields such as healthcare, manufacturing, and other professional sectors. Successfully completing this exam is not just a certification; it's a gateway to success in any environment where proficiency in computers and technology is indispensable.

2. ▤ Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. ⊕ Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

1

EXERCISES

4. ⏱ Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

200
QUIZ

5. ⚡ flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

278
FLASHCARDS

6. 📖 Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.

55
GLOSSARY OF TERMS

7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
  1. Best Postsecondary Learning Solution

- **2015**
  1. Best Education Solution
  2. Best Virtual Learning Solution
  3. Best Student Assessment Solution
  4. Best Postsecondary Learning Solution
  5. Best Career and Workforce Readiness Solution
  6. Best Instructional Solution in Other Curriculum Areas
  7. Best Corporate Learning/Workforce Development Solution

- **2016**
  1. Best Virtual Learning Solution
  2. Best Education Cloud-based Solution
  3. Best College and Career Readiness Solution
  4. Best Corporate / Workforce Learning Solution
  5. Best Postsecondary Learning Content Solution
  6. Best Postsecondary LMS or Learning Platform
  7. Best Learning Relationship Management Solution

- **2017**
  1. Best Overall Education Solution
  2. Best Student Assessment Solution
  3. Best Corporate/Workforce Learning Solution
  4. Best Higher Education LMS or Learning Platform

- **2018**
  1. Best Higher Education LMS or Learning Platform

    2. Best Instructional Solution in Other Curriculum Areas

    3. Best Learning Relationship Management Solution

- **2019**
  1. Best Virtual Learning Solution
  2. Best Content Authoring Development or Curation Solution
  3. Best Higher Education Learning Management Solution (LMS)

- **2020**
  1. Best College and Career Readiness Solution
  2. Best Cross-Curricular Solution
  3. Best Virtual Learning Solution

11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- What Is the uCertify ITF Associate Certification?

- What Is the CompTIA IT Fundamentals Certification?

Chapter 2: Core Hardware Components

- Introducing Internal Components

- Exploring Motherboards, Processors, and Memory

- Exploring Storage and Expansion Devices

- Exploring Power and Cooling

- Summary

- Exam Essentials

- Written Lab

Chapter 3: Peripherals and Connectors

- Understanding Common Peripherals, Interfaces, and Connectors

- Summary

- Exam Essentials

- Written Lab

Chapter 4: Computing Devices and the Internet of Things

- Exploring Common Computing Devices

- Understanding the Internet of Things

- Summary

- Exam Essentials

- Written Lab

Chapter 5: Operating Systems

- Operating System Fundamentals

- Managing an Operating System

- Summary

- Exam Essentials

- Written Lab

Chapter 6: Software Applications

- Understanding Application Architecture and Installation

- Exploring Common Application Types

- Summary

- Exam Essentials

- Written Lab

Chapter 7: Software Development

- Exploring Programming Languages

- Understanding Programming Concepts and Techniques

- Summary

- Exam Essentials

- Written Lab

Chapter 8: Database Fundamentals

- Understanding Databases

- Summary

- Exam Essentials

- Written Lab

Chapter 9: Networking Concepts and Technologies

- Exploring Connection Types and Features

- Understanding Network Connectivity Essentials

- Setting Up a Wireless Network

- Summary

- Exam Essentials

- Written Lab

- Summary

- Exam Essentials

- Written Lab

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

32	07:28
VIDEOS	**HOURS**

12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

Here's what you get

40	**2**
PRE-ASSESSMENTS QUESTIONS	FULL LENGTH TESTS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

13. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

Core Hardware Components

- Installing Motherboard Components
- Installing a Motherboard, Processor, and Processor Fan
- Installing PCIe Cards on a Motherboard
- Connecting a PCIe Sound Card
- Protecting a Computer Using a UPS
- Installing SMPS and Connecting it to the Motherboard

Peripherals and Connectors

- Configuring a Network Adapter
- Sharing a Printer
- Configuring the Screen Resolution Setting
- Adding a Keyboard Layout
- Configuring the Mouse Settings
- Installing a Printer
- Connecting the Motherboard to the Internal Hard Disk
- Installing Input and Output Devices
- Inserting Ink Cartridges in an Inkjet Printer
- Identifying the Brightness Control Keys on a Keyboard
- Connecting a VGA Cable to a Monitor
- Connecting the Monitor and Headset to a CPU
- Connecting a Laptop and Television
- Connecting an SD Card to a Laptop
- Connecting an External Hard Drive to a Computer
- Connecting a Wireless USB Receiver to a Laptop
- Connecting a Speaker to a Laptop

Computing Devices and the Internet of Things

- Connecting a Laptop and Phone via Bluetooth

- Pairing an iPhone with a Vehicle's Sound System
- Connecting a Docking Station to the Laptop
- Identifying the Audio Adjustment Keys on a Keyboard
- Securing a Laptop with a Cable Lock
- Connecting a Laptop to an AC Power Adapter
- Turning On Portrait Mode in Android
- Connecting an iPhone to a Wi-Fi Network

Operating Systems

- Using Basic Linux Commands
- Running Commands on PowerShell
- Creating a Virtual Machine
- Configuring a Default Domain Password Policy
- Propagating Permissions
- Finding Files
- Working with the Task Manager
- Managing NTFS Permissions
- Adding and Removing a New User Account
- Manipulating Files
- Using the Task Scheduler
- Configuring UAC Settings
- Running the Disk Cleanup
- Creating a Volume
- Creating a Shortcut

Software Applications

- Setting up a Demilitarized Zone
- Setting Automatic Windows Updates
- Disabling and Enabling a Device Driver
- Uninstalling a Program
- Configuring Windows Defender Firewall
- Creating and Saving a Workbook
- Creating and Saving a Basic Presentation
- Creating and Saving a Document
- Configuring the Edge Pop-Up Blocker

Software Development

- Printing Ordered and Unordered Lists in HTML
- Adding an Image and using Headings in HTML
- Using Image as Hyperlink
- Creating a Function
- Using the for Loop
- Using the while Loop
- Using the if else Statement
- Using the for Loop with Array
- Printing "Hello, world!" in HTML

Database Fundamentals

- Using SQL Queries

Networking Concepts and Technologies

- Adding a DNS Server
- Configuring a Router
- Connecting a DSL Modem to a Laptop
- Configuring a DHCP Server
- Connecting a Wireless Router to a Laptop

Security Concepts and Threats

- Using Social Engineering Techniques to Plan an Attack
- Cracking Passwords
- Detecting Rootkits
- Analyzing Malware
- Conducting a DoS Attack Using Smurf Attack
- Configuring a Proxy Server

Security Best Practices

- Configuring a VPN
- Disabling a Service

- Using a Symmetric Encryption Algorithm
- Configuring Screen Savers

Business Continuity and Computer Support

- Restoring Files
- Backing Up Files
- Creating a Restore Point

Here's what you get

83	67	01:02
LIVE LABS	VIDEO TUTORIALS	HOURS

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