# **IC3 GS4: Computing Fundamentals**

### **Course Outline**

<u>Course Introduction</u> 2m

**Course Introduction** 

#### Module 01 - Operating System Fundamentals

2h 54m

Lesson 1: What is an Operating System?

How Applications and Hardware Work with an OS

The Old Days of the CLI

What the Modern OS Supplied

Demo - Navigating a Modern App

Demo - Working with Multiple Apps

Common OS Features

Demo - Working with Windows

**Directory Infrastructure** 

Demo - Managing Files and Folders

Drivers and Hardware

Common Interface

Demo - Signing In to Windows 8 and Managing Tiles

Demo - Using the Account ID Menu

Demo - Viewing the Charms

Demo - Working with Files and Folders

Demo - Navigating the Desktop

**Directory Infrastructure** 

**Updates and Patches** 

Demo - Control Panel

Lesson 2: Configuring the Operating System

Visual Options

The Background

Demo - Desktop Background

Demo - Working with the Elements of a Desktop Window

Lesson 3: What is an Application?

Working with the Operating System

Working with the Software

Security

Lesson 4: Using Control Panel

Software

Demo - Adding/Removing Software

Hardware
Visual Devices
Date/Time
Servers
Module 01 Review
Module 02 - Co

# Module 02 - Computer and Network Terminology

49m

Lesson 1: Hardware and Peripherals

Hardware and Peripherals

Lesson 2: Storage

Demo - Hardware

Configuration

**Storage Devices** 

How a Hard Drive Works

Demo - Storage

Lesson 3: Connectivity Devices

Server Types

Desktop

Lesson 4: Network Components

**Switches** 

Routers

Demo - Network Settings

Firewalls

Module 02 Review

# Module 03 - Working with Software and the OS

54m

Lesson 1: Software and Concepts

Managing Software

Software

Demo - Changing Windows Defender Settings

Lesson 2: Licensing

Types of Software Licenses

Pirating

Demo - Licenses

Lesson 3: Using Software

**Hardware Limitations** 

Presentations

Publishing

Content and Entertainment

Working with Media

Demo - Applications

Lesson 4: Software Tools

Database vs. Spreadsheet

Demo - Database vs. Spreadsheet

File Compression

Demo - File

Compression

Disk Management

Malware Detection

Module 03 Review

### Module 04 - Troubleshooting

Lesson 1: Software

Updates

Removing Malware

Safe Mode

Knowledge Base

Demo - Getting Help

Task and Process Management

Demo - Task Manager

Lesson 2: Hardware, Devices, and Peripherals

Firmware

Cables and Connections

Devices and Peripherals

Lesson 3: Backup and Restore

Backups

Demo - Backups

Module 04 Review

Course Closure

Total Duration: 5h 16m

37m