

# CPD Course in PC Technology

Open Learning Programme Information

<b>Programme Information</b>	<b>Course Outline</b>	<p>The course is organised into a series of individual lessons, each with its own practical exercises and assignments, which are briefly described as follows.</p> <p><b>Lesson 1 - Introduction to PC Hardware</b> This lesson is designed to provide you with an overview of the development of computer technology from its inception more than 50 years ago to today's powerful desktop systems. You will learn the basics about the major components of a computer system and how they combine to provide a cohesive system capable of processing millions of instructions per second. You will also learn about the main components of Microsoft's Windows operating system.</p> <p>The following topics are covered by this lesson: A short history of the computer, Computer numbering Systems, PC hardware components overview, The role of computer operating systems, Introducing the Windows operating system and Lesson Review/Assignments.</p> <p><b>Lesson 2 - Operating System</b> This lesson introduces you to the major Windows Operating System functions (including Windows 95/98/NT/ME/2000/XP) and is suitable for novices and experienced users alike.</p> <p>The main topics covered are: The function of an Operating System, A History of Windows, Installing the Windows Operating System, Windows overview and glossary, The Start Menu and Task Bar, The Desktop and Clipboard, Windows Explorer, The Programs Menu, The Windows Control Panel, Windows Accessories, the Microsoft Network and Dial-up Networking, Setting up Printers and Lesson Review/Assignments.</p>
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### **Lesson 3 - An Introduction to the Internet**

On completion of this lesson, you will understand the terminology of the Net and be aware of both its history and its current status; you will learn about some of the basic web page design principles and be introduced to HTML, the language of the Internet.

The main topics covered include: Getting started and installing your software; Getting connected to the Internet; Choosing the right Internet Service Provider; Setting up and registering your own Website; A guided tour of the Internet; An Introduction to Internet Explorer; Email with Outlook Express; An Introduction to HTML; An Introduction to Microsoft's FrontPage; Lesson Review/Assignments.

### **Lesson 4 - PC Hardware Components**

This lesson describes the individual components of a Personal Computer, identifying each component and discussing its function and connections in a precise but simple style avoiding the usual jargon found in most textbooks and hardware manuals.

The following components are described in detail: The power supply, The motherboard and its on-board components, Processors, RAM (Memory), Data Storage Devices, Parallel and serial interfaces, Video, Graphics and Sound Cards and Lesson Review/Assignments.

### **Lesson 5 - Input/Output Devices**

This lesson is designed to provide you with a thorough briefing on the principles of Input and Output Devices and Other External Devices.

The following topics are covered: Modems, Monitors, The Keyboard and Mouse, Other Peripheral Devices and Lesson Review/Assignments.

### **Lesson 6 - Diagnostics and Fault Finding**

This lesson takes you step-by-step through the fault finding procedures required to diagnose a range of problems and solutions connected with a faulty PC; all you need is a screwdriver and perhaps a little help from your Course Director! The detailed yet simple instructions, together with close-up photographs and drawings take you through each procedure.

The following topics are covered: Important safety information, PC case layout and I/O device connections, Identifying the key Motherboard components, Dealing with boot failure, Diagnosing hard disk drive problems, Diagnosing floppy disk drive problems, Creating a boot disk, Diagnosing CD-ROM problems, Windows operating system problems, System diagnostic tools, The "Snooper" System Information Utility, Diagnosing printer problems, Other useful diagnostic tools, Hardware and software conflicts, Preventative maintenance procedures and Lesson Review/Assignments.

### **Lesson 7: Data Communications & an Introduction to Networks**

This lesson will look at how different data types (voice, data, image and video) is transmitted using technology and the various transmission media required to perform the data transfer, as well as the fundamentals to data communication and cost.

The main topics covered include: Data transmission, Fundamentals of Data Communications, Asynchronous and Synchronous Communications, Transmission Efficiency, An Introduction to Networks, Ethernet Alternative Network Technologies and Lesson Review/Assignments.

### **Lesson 8: Case Study**

This lesson comprises of a practical assignment designed to test your understanding of the entire course.