



SYSTEMS ARCHITECTURE & HARDWARE

2 day course: 9.30am – 5pm

This course covers the fundamentals of PC architecture and technology including hardware components, storage devices and peripherals, device installation and upgrade. The course is suitable for those who need to support IT hardware in the work place.

Delegates will learn how to:

- Identify types and characteristics of PC components, including motherboard, CPU, memory, storage, input and output devices
- Understand the characteristics of CPU components
- Install and configure peripheral devices
- Perform basic PC maintenance and troubleshooting
- Install and configure printers
- Identify types and characteristics of portable computers

PC FUNDAMENTALS

- Motherboards
 - Chipsets
 - BIOS
- CPUs
- 32-bit and 64-bit CPUs
- Input Devices
- Output Devices
- Storage Devices
- Connectivity Devices
- Power Supply Units
- Uninterruptible Power Supply (UPS)

BUSES

- System Buses
- Data Buses
- Peripheral Component Interconnect - PCI
- Accelerated Graphic Port - AGP
- USB
- FireWire

MEMORY

- Introduction to Memory
- Optical, Magnetic and Solid State Memory
- RAM
- Installing RAM
- ROM

DISPLAY

- Display Technologies
- Video Cards
- Video Resolution

DATA STORAGE DEVICES

- Introduction to Data Storage Devices
- Fixed Storage
- Removable Storage
- Other Removable Storage
- External Hard Disk Drives
- Connecting SCSI Devices

INPUT AND OUTPUT DEVICES

- Keyboard
- Mouse
- Stylus
- Tablets
- Printers and Printer Types
- Printer Drivers
- Printer Troubleshooting and Maintenance
- Scanners
- Digital Cameras
- Webcams
- Audio Devices

PORTABLE COMPUTING

- Laptops and Netbooks
- Power Management
- Docking Stations

SYSTEMS ARCHITECTURE

- Binary data
- CPU characteristics and operation
- Communication with peripheral devices
- Concurrent processing
- Distributed operating systems
- Distributed applications
- Mainframe systems
- Data and process distribution



ASSUMED KNOWLEDGE:

Delegates attending this course should be familiar with using PCs regularly and have intermediate knowledge of using Windows and Microsoft Office applications including Word, Excel and Outlook.

THIS COURSE PREPARES YOU FOR:

- *ICT PROFESSIONAL COMPETENCE (PROCOM) DIPLOMA: WORKING WITH ICT HARDWARE AND EQUIPMENT (LEVEL 2) AND SYSTEMS ARCHITECTURE (LEVEL 3)*