

IT Essential for Teachers

Course Duration:

60 hours, 10 Days, 6 hours per day

Course Outline:

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|----|--|---------------------------|
| 1. | Hardware maintenance, Troubleshooting & Networking Concept -- 7 days(42 hours) | |
| 2. | Operating System using Windows-----1 day (06 hours) | |
| 3. | Operating System using Linux-----1 day (06 hours) | |
| 4. | Office Application (MS Word)-----1 day (06 hours) | |
| | | 10 days (60 hours) |

Chap	Description
Hardware maintenance, Troubleshooting & Networking Concept	
1.1	INTRODUCTION TO COMPUTER SYSTEM
	Introduction to Computer
	Introduction to Personal Computer (PC)
	Hardware
	Software
	Firmware
	Understanding Booting Process
	How Computer Hardware & Software work together
	Practical: 1. Identify the different components of a PC
	2. Assembling and Disassembling PC
1.2	MOTHERBOARD AND ITS COMPONENTS
	Motherboard
	Components of a motherboard
	Expansion slot and sockets
	Interfaces
	How to choice proper IDE/SCSI interface
	Ports
	Different Type of Ports
	Serial Port
	Parallel Port
	BIOS
	Motherboard Chipset
	Controller
	Bus
	Physical Part of Bus
	CPU Bus
	Expansion Bus
External Bus	
1.3	PROCESSORS
	Microprocessor
	Factors that influence the processors capacity
	History and development of Intel processors
	Intel Processor's Socket Information
	Processors Package Type
	Microprocessor Comparison Chart
1.4	MEMORY SYSTEM
	Understanding Memory and Storage
	Measuring Units of Memory
	Access Methods of Memory
	Classification of Memory
	The Main Memory / RAM
	ROM
	Virtual Memory
	Cache Memory
	Memory Chip Packages

Chap	Description
Hardware maintenance, Troubleshooting & Networking Concept	
	Video Memory
	Other Forms and Notations of Memory
	Practical (Identifying Different Kinds of Memory and their Slots)
	Installing memories
1.5	STORAGE SYSTEM AND BACKUP MEDIA
	Storage Device
	Magnetic Storage Media
	Magnetic Disks
	Magnetic Tape
	Magnetic Drum
	Optical Storage Media
	Other Disk Drives
	Different types of Disk Interfaces
	IDE Interface
	SCSI Interface
	Backup, Fault Tolerance and Performance Issue
	Practical 1. Identifying different Disks their Ports & Slots
	2. Installing hard drives
1.6	PARTITIONING AND FORMATTING HARD DISK
	Understanding Partition
	Understanding File System
	Partitioning HDD for installing Windows 98
	Partitioning and Formatting a Hard Disk using Win98 Boot disk?
	Practical 1. Partitioning, Activating and Formatting a Hard Drive
1.7	OPERATING SYSTEM AND THEIR INSTALLATION
	Overview of Operating System
	Overview of DOS
	Overview of Microsoft Windows
	Other Operating Systems
	How to Install Windows 98
	Practical 1. Installing Windows 98/2000 Operating System
1.8	DUAL BOOTING AND INSTALLING MULTIPLE OPERATING SYSTEMS
	Understanding Dual Booting
	Quick Installation of Windows XP
	Detail Installation of Windows XP
	Windows XP Service Pack 2 Overview
	Windows XP Service Pack (SP) Overview
	Installing Red Hat Linux
1.9	PERIPHERAL DEVICES
	Introduction to Peripheral device
	Printer
	Scanner
	Monitor
	Speaker / Sound System
1.10	PORTABLE COMPUTERS
	Introduction to Portable Computer
	The Basic comparison between Laptops and Desktops
	Basic Component of a Portable Computer
1.11	UNDERSTANDING POWER SYSTEM AND SAFETY
	Understanding Electrical Power
	Overview of Power Supply Unit (PSU) and Connectors
	Power-Supply Problems
	Power-Protection Devices
	Practical (Identifying components and ratings of a Power Supply Unit)
1.12	VIRUS PROTECTION AND SECURITY ISSUE
	A Brief History of Computer Virus
	How Viruses Spread
	Types of Viruses
	What is not a Virus
	Self Defense for Viruses

