



Certified Hardware & Networking Professional

Duration : Twelve Months

The Program emphasizes on learning practical problem solving skills, thus helping the students to make a career in Hardware & Networking. The course is beneficial for those who have passed their 10th / 12th or pursuing their graduation. This practical based learning approach has yielded high satisfaction.

Module I : PC Engineering

Assembling

- ❖ Introduction to Assembling , Difference between Branded & Assembled Computers, Overview of different devices with in computer, Compulsory and Optional Parts of Computer
- ❖ Criteria of Microprocessor Selection, Types of CPU
- ❖ Details of Different CPU Series, Input Output Slot, Introduction of RAM Slot, Introduction of Motherboard's Chip Set and On board Facilities.
- ❖ Introduction of Memory & Types of RAM (D-RAM,SD-RAM,DDR-RAM,RD-RAM,DDR-RAM, DDR2-RAM, DDR3-RAM etc.), Identification and uses on Motherboard.

Installation

- ❖ Introduction, Hardware & Software, Types of Software: System Software & Application Software, Types of File, Types of Directory, Practicals on Installations of System and Application Software and their different versions.

Troubleshooting

Understanding Computer Faults and Data Recovery, Software and other Hardware, Parental Control, User Privileges and Local Security Policies, Hardware Device Driver Installation and Troubleshooting.

Configuring IE7, Pop-up blocker, IE security and privacy options, Managing cookies and Internet Security Zones, Phishing filter, Backup and Restore, Disk and Storage Management, Check Disk, Defragmentation and Disk Cleanup, Optimizing system Performance, Configuring Ready boost and Startup Program, Using advanced boot option, Restoring stability with system restore, Managing services, Working with Registry Disk manager, System Utilities & Partition Magic.

Module II : Hardware Engineering

Analog and Digital Electronics

- ❖ Introduction to Electronics, Different parameters of Electricity
- ❖ Introduction to Various components utilized in Electronics stream.
- ❖ Understanding working of a Digital Multimeter.
- ❖ Understanding Number systems and their Arithmetic Operations.
- ❖ Repairing of SMPS, UPS, Monitor, Keyboard, Mouse, Scanner, Printer, Storage Devices, Motherboard etc.



Module- III - Network Engineering

Network Essential

Introduction of networking, Meaning, Types, Advantages, Challenges and Cable Testing. Introduction of Peer to Peer Network, advantage of Peer to peer Network, Installation of LAN card, LAN Driver Installation on operating system, Configuring Network Components, Setting up a Network Identity, Network Commands , Drive and Folder sharing and mapping, Printer installation on Local and Network PC.

Windows Sever 2003 with EXCHANGE SERVER 2003

Introduction to Servers, Understanding their Features, Installation, Startup and Boot Process Local Users And Groups, Comparison between Different Users Client Installation, installation of DHCP Server, Disk Quota Management, Use of NTFS security, Drive Folder Sharing, Logon Script, Home Folder, Remote Desktop Configuration of Outlook Express, Installation & configuration of Exchange Server 2003. Troubleshooting.

LINUX

Overview of LINUX, Usage Basics, Running Commands and Getting Help, Browsing the File system, using the bash shell. File System, System Administration Tools, Installation, System Initialization and services, Kernel services and configuration. File system Management, Network configuration, Swap File system Configuration, User Administration, Printing and Administration Tools, the x Window system, Advanced file system Management and Troubleshooting.

WAN

Introduction to Wide Area Network, WAN technology, WAN Service, Wi-Fi zone, Wireless Networking Concepts, Cellular Technology, Communication Media, ISDN, Leased Line, Frame Relay, HDLC, PPP, Cisco Routers and Switch connection and configuration.

Courses

Duration

SCPE (Assembling, Installation, Troubleshooting)	Two Months
SCHT (Digital Electronics, Microprocessor, SMPS, Keyboard and Mouse)	Two Months
SCHT (SMPS, UPS and Printer)	Two Months
SCHT (CRT Monitor and Scanner)	Two Months
SCHT (Storage Devices, Motherboard and Laptop)	Three Months
SCNE (Network Essential, Peer to Peer and WAN)	Three Months
MCSE (Microsoft Certified Systems Engineer)	Four Months
RHCE (Red Hat Certified Engineer)	Four Months
CCNA (Cisco Certified Network Associate)	Six Weeks
SCHE (Scientech Certified Hardware Engineer)	Six Months
SCHE (Scientech Certified Network Engineer)	Six Months
SCCHNE (Scientech Certified Computer Hardware & Network Engineer)	Twelve Months