



(A Venture of Chandigarh ETC Services Pvt. Ltd.)

An ISO 9001:2015 Certified Organisation with Completely Online Management System

Website : www.citcchandigarh.com

Course Syllabus: Advance Diploma in Hardware & Networking

Batch Name: ADHN

Eligibility: 12th

Course Start: 1st of Every Month

Course Duration: 350 Hours

Courses / Modules Paper

Module 1

Paper 1

Core Hardware & PC Assembling

Module 2:

Paper 1

Basic Networking Concepts, Network Configuration & Security

Module 1:

Paper 1: Core Hardware and PC Assembling

1: Basic Computer Concepts

- 1.1 Generation of Computer
- 1.2 Types of Computer
- 1.3 Characteristics
- 1.4 Block Diagram
- 1.5 CPU
- 1.6 Motherboard
- 1.7 RAM
- 1.8 ROM
- 1.9 Ports
- 1.10 Connectors
- 1.11 Vables
- 1.12 Slots and Crads
- 1.13 Bus Lines
- 1.14 Optical Disk Drive

2: Electronics

- 2.1 Electronic Components
- 2.2 Number System
- 2.3 Binary Number System
- 2.4 Octal Number System
- 2.5 Decimal Number System
- 2.6 Hexadecimal Number System
- 2.7 Logic Gates
- 2.8 Flip Flops
- 2.9 Multiplexer
- 2.10 De-Multiplexer

3: Input Device

- 3.1 Keyboard
- 3.2 Mouse
- 3.3 Touch Screen
- 3.4 Trackball and Joystick
- 3.5 Microphone
- 3.6 Scanning Devices
- 3.7 Bar Code Reader
- 3.8 MICR

4: Output Devices

- 4.1 Monitor Printer
- 4.2 Printer
- 4.3 Speaker
- 4.4 Projector

5: Storage Devices

- 5.1 Hard Disk
- 5.2 Compact Disk
- 5.3 Digital Video Disk
- 5.4 Pen Drive
- 5.5 Memory Card
- 5.6 Portable Hard Disk

Module 2:

Paper 1: Basic Networking Concepts, Network Configuration & Security

1: Introduction about Computer

- 1.1 Basics of Computer
- 1.2 Organization of Computer
- 1.3 Software and Hardware
- 1.4 Input/Output Device

2: Basic Networking concepts

- 2.1 Network Topologies
 - LAN
 - WAN
 - MAN
- 2.2 Networking Model
 - OSI Model
 - TCP/IP Model
- 2.3 Network Adapters
- 2.4 Introducing Protocols
- 2.5 Cabling and Troubleshooting

3: Introduction to various Networking Devices

- 3.1 Routers
- 3.2 Switches
- 3.3 Modems
- 3.4 Hubs
- 3.5 Wired and Wireless Technology

4: Inside PC

- 4.1 Opening the PC and Identification
- 4.2 Study of different Blocks
- 4.3 Assembling and Disassembling

5: Network Basic and Configuration

- 5.1 Setting IP Addresses
- 5.2 Sharing Files and Folders
- 5.3 Network troubleshooting
- 5.4 PING test, ipconfig etc.

6: Introduction to Server and Network Security

- 6.1 Types of Server
 - Files Server
 - E-Mail Server
 - Proxy Server
- 6.2 Basics of Internet and Intranet
- 6.3 Types of Internet Connections
 - Dialup, Broadband, Leased Line, Wi-Fi, 2G, 3G, 4G, www, E-Mails, Search Engines, Social Networking
 - Cloud Application
 - Audio-Video Conferencing
 - Voice Over Internet Protocol(VOIP)
- 6.4 Recovery and Backup
- 6.5 Essential Security Measures