# **Certificate in Computer Course [CCC]**

Minimum Duration: 06 month Maximum Duration: 2Years

Course Fee: 5600 Age: No bar

**Medium of Instruction:** English

Eligibility: 10 + 2 OR 3-year Diploma of Board of Technical Education or equivalent OR

2-year ITI Programme of any trade after 10th standard

# **Course Objective and opportunities**

The course provides an opportunity for understanding the use of computer and its application. The course provide the extensive theoretical concepts as well as in depth acquaintance in DTP software and there practical usage. The learner shall be able to understand the basic terminologies and component related to computers, understand the use of word processors, spreadsheets, making presentations, theoretical understanding and usage of internet applications, use of various operating systems etc.

<b>Course Code</b>	Title of the Course	Credits	M. Marks
CCC-1.1	Office Tools and Internet	8	100
CCC-1.2	Fundamentals of Computers	8	100
CCC-1.3(L)	Practical Lab	8	100
Total Credits		24	300

### **CCC-1.1 Office Tools and Internet**

# MS Word

Introduction, MS-Word, Features, Creating a MS Word Document, Saving and Opening Documents in Word, Interface, Toolbars, Ruler, Menus, Keyboard Shortcut, Editing, Previewing, Printing & Formatting a Document, Find & Replace, Using Thesaurus, Using Auto-Multiple Functions, Mail Merge, Handling Graphics, Tables & Charts, Document into various formats.

### **MS-Excel**

Introduction, Worksheet basics, Creating worksheet, Entering into worksheet, Heading information, Data & Text, Date & Time, Alphanumeric values, Saving & quitting worksheet, Opening and moving around in an existing worksheet, Toolbars and Menus, Excel shortcut and function keys, Working with single and multiple workbook, Working with formulae & cell referencing, Auto sum, coping formulae, Absolute & relative addressing, Worksheet with ranges, Formatting of worksheet, Previewing & Printing worksheet, Graphs and charts, Database, Creating and using macros, Multiple worksheets- concepts, creating and using.

### MS-Power point and Other DTP Software

Introduction, Presentations, Creating Slides, Manipulating & Enhancing Slides, Organizational Charts, Excel Charts, Word Art, Layering an Object, Animations and Sounds, Inserting Animated Pictures or Accessing through Object, Inserting Recorded Sound Effect or In-Built Sound Effect, Other DTP Software's: MS-Publisher, Adobe Page maker, packages, Corel Draw, Adobe Photoshop.

### **Communication:**

**Fundamentals of Data Communication:** Concept, Data Communication modes, Communication Hardware.

**Computer Networks:** Network concept and classification, LAN, WAN. **Emerging Trends in Networking:** E-Mail, EDI, Networking Scenario.

#### **Internet Awareness:**

**Internet:** An Overview: DNS, working of Internet, Tools and Services on Internet, Browsing the Internet, Gopher.

**Internet Tools:** E-Mail, PTP & Telnet: E-Mail, E-Mail, Addressing, The Components of E-Mail, Address Book, Troubleshooting in E-Mail, Interesting E- Mail Addresses, Mailing Lists and list servers, FTP and Telnet, Interesting Sites.

Browsers: Netscape Navigator, Search Engines, NCSA, Mosaic, Microsoft Internet Explorer.

Visiting web sites: Downloading.

### **CCC-1.2 Fundamentals of Computers**

**Computer Basics:** Introduction, Algorithms, A Simple Model of a Computer, Characteristics of Computers, Problem-solving Using Computers.

**Data Representation:** Data Representation, Integer Representation, Floating-Point Number Representation, Conversions between Number Bases, Converting Binary, Octal, and Hexadecimal to Decimal, Converting among Binary, Octal, and Hexadecimal, Hexadecimal to Binary conversion, Error Detection Codes

**Input & Output Devices:** Introduction, Description of Computer Input Units, Other Input Methods, Computer Output Units, Terminals.

**Computer Memory:** Introduction, Memory Cell, Memory Organization, Read Only Memory, Serial Access Memory

**Memory in Physical Devices:** Introduction, Physical Devices Used to Construct Memories, Magnetic Hard Disk

**Disk Drives:** Introduction, Floppy Disk Drives, Compact Disk Read Only Memory, Magnetic Tape Drives

**General Concept of Operating System:** Introduction, Operating System, History and Evolution, Functions of Operating System, Multitasking, Multiprocessing, Time Sharing, Real Time OS with Examples,

**Disk Operating System (DOS):** Introduction, History & versions of DOS, DOS basics- Physical structure of disk, Disk Structure, FAT; File & directory structure and naming rules, Booting process, DOS system files, DOS commands- internal & external;

**Windows concepts:** Features, Windows Structure, Desktop,, Taskbar, Start Menu, My Computer, Recycle Bin, Windows Accessories: Calculator, Notepad, Paint, WordPad, Character Map, Windows Explorer, Entertainment, Managing Hardware & Software in Windows:

Installation of Hardware, Software, Scanning Documents, System Tools, Communication, Sharing Information between programs

# CCC-1.3(L) Practical Lab

The learner needs to show various components of computer hardware. The practical shall be based on preparing various tables with MS-Word, small balance sheet with MS Excel, slide presentations, practice on DOS commands and uses of various windows accessories including usage of internet f