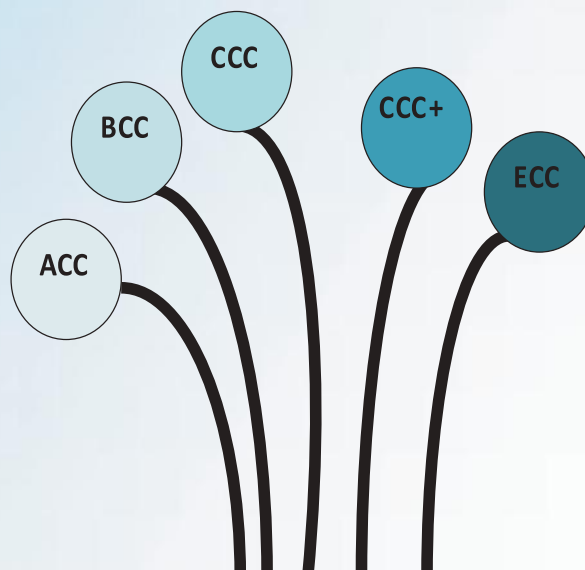


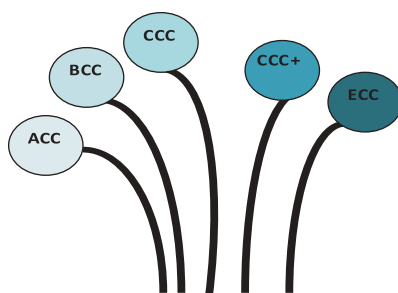


DIGITAL LITERACY for DIGITAL INDIA

the interest, attitude and ability of individuals to appropriately use digital technology and communication tools to access, manage, integrate, analyze and evaluate information, construct new knowledge, create and communicate with others in order to participate effectively in society”

Initiatives by **NIELIT**



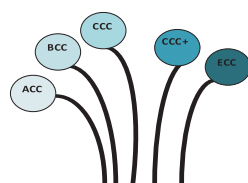


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NIELIT CENTRES



INTRODUCTION

Digital Literacy is build upon the foundation of traditional forms of literacy. It could be conceptualised as marrying of the two terms i.e. digital and literacy. While digital information is a symbolic representation of data, and literacy refers to the ability to read for knowledge, write coherently, and think critically about the written word. Digital Literacy is more than just computer literacy. Digital literacy may be typically defined as an individual's ability to understand, assess, use, share and create the content using Information, Communication & Technology and is not only limited to know how to send a message or watch a video.

Digital Literacy plays a vital role in e-services like e-Commerce, e-Governance, e-Panchayat, e-Learning, etc. In current scenario technology is becoming inevitable part of our daily life, be it using a mobile phone, drawing cash from ATM machines, booking a railway ticket etc. Hence, there is a need that, every individual in the country must be equipped with necessary skills so as to use the technology with responsibility. It is a matter of fact that the urban population has greater exposure to technology and learning platforms as compared to the people living in rural areas.

In order to create digitally literate population, NIELIT has devised ICT Proficiency Courses with soft skill components (available in newly launched courses) that provide incumbents with an articulate approach and language for development of skills in ICT and recuperating the capabilities. The Courses which are being offered by NIELIT on Digital literacy are intended to align the behavioural outlook and learning aspirations of incumbents thereby contributing towards the development of technological advancement within the workforce and increasing the knowledge base. The courses will emphasize on skill development and latest trends in the technological arena, which will help an individual to bridge and close the technological gaps and bridging the digital divide. Factually speaking, availability and creation of workforce equipped with ICT skills along with soft skill component is a vital element in the enhancement of Government services.

With an aim to e-literate the common man right from the urban population to the rural masses, NIELIT had launched its first IT literacy programme title "Course on Computer Concepts" now popularly known as CCC in year 1999. This course was the first step of NIELIT towards spreading e-literacy amongst common man. Over the years, NIELIT has registered its PAN Indian presence in the following e-services:

- e-Commerce: Fee payment received through Online mode i.e. Credit Card, Debit Card, Net Banking, NEFT, Payment paid to customers through NEFT.
- e-Governance: NIELIT has been mandated that it should strive and make forays in the vast realm of capacity building in the e-Governance sector for Government employees.
- e-Panchayat: NIELIT has been imparted training to Panchayati Raj institution functionaries throughout in India.
- e-Learning: The e-learning material is made available to public for study purpose.

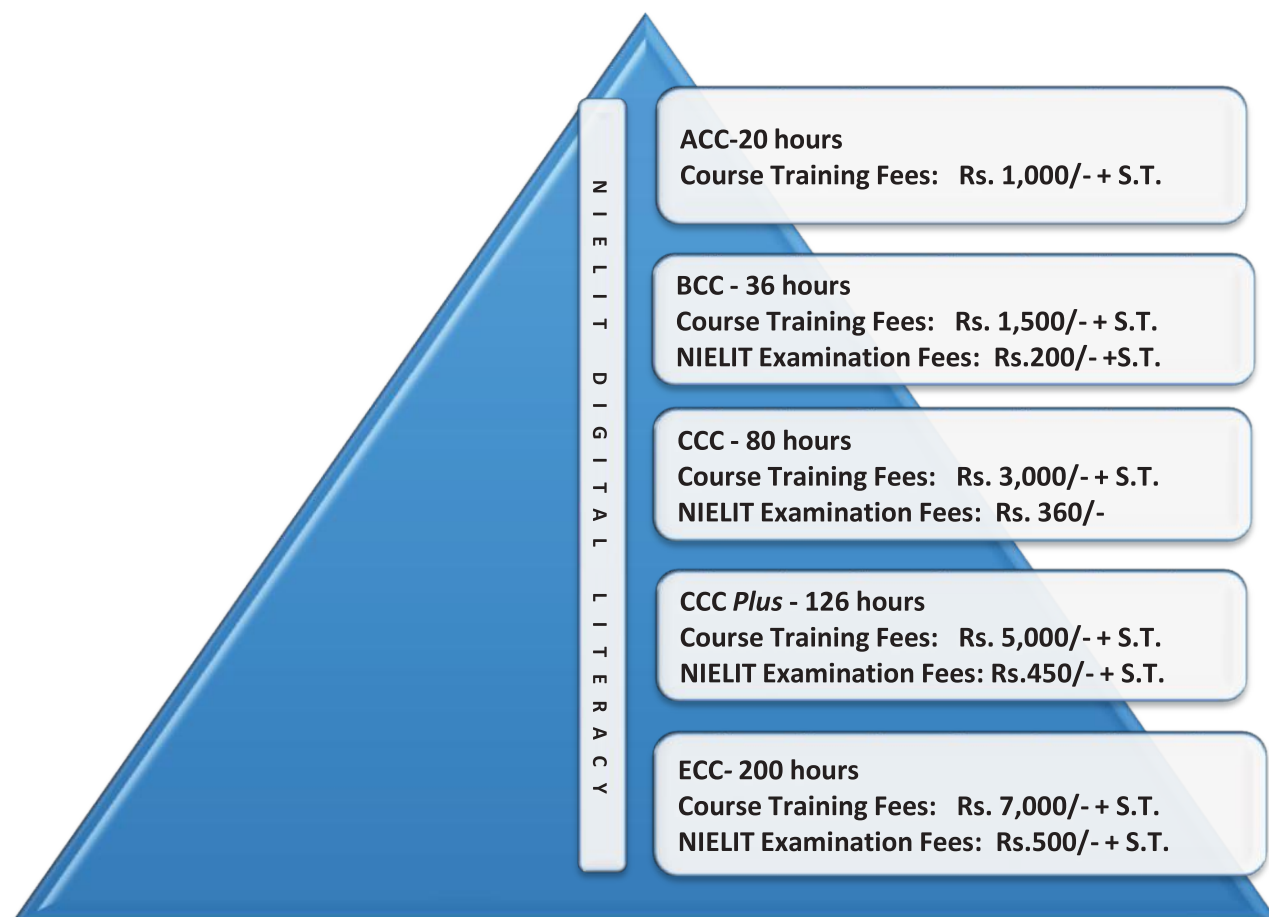
Now days, e-Governance is the talking point at every platform. The question now arise what is e-Governance and how it may be utilised to enhance deliverables. e-Governance is typically an application for delivering Government services to the Citizen through Information Communication. Hence, in order to

(ii)

utilise these services, the citizens should be Digitally Literate irrespective of their knowledge and education.

To achieve the aim, NIELIT, is providing a platform to various segments of population by its wise variety of digital literacy/It literacy programmes titled ACC(20 hours), BCC (36 hours), CCC(80 hours), CCC *Plus* (126 hours) and ECC(200 hours); which equips an individual to explore the digital world. The courses range from literacy to re-skilling and employability.

The repertoire of NIELIT's Digital Literacy Programmes is as under:

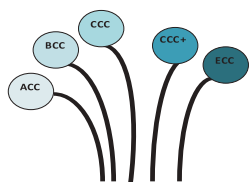


** Course Training Fees are as per existing Market Trends and are suggestive only. Fees in respect of ACC/ CCC Plus and ECC are under finalization/ approval stage*

NIELIT is also undertaking various programmes under Capacity building which includes “training to 1380 women candidates in Elementary Computer Education” , “To increase employability of women candidates by imparting professional IT Training (A total of 760 candidates to be trained) “ , “To create a pool of 4800 skilled women workforce employable in Customer Care Industries like Call Centres, Tourism, Travel, Hotels, Banking, Corporate Sectors etc.” , “training to Government officials on Information Security”, etc.

Lastly, India has an internet user base of about 250.2 million as of June 2014. Digital media in any form is now used daily by everyone but very few of them know actually about it. Hence, there is also a need to sensitize the population about the right use of technology.

(iii)



National Institute of Electronics and Information Technology (NIELIT) was set up in the year 1994 as DOEACC Society. Subsequently, in 2002, several centres of CEDTI and RCC were merged with the then DOEACC Society, and a new chapter was added in its history.

NIELIT is dedicatedly working in the following areas:

- Capacity building in e-Governance
- Research and Development
- Education in IECT
- E-learning
- E-Security
- Digital Literacy
- Assessment & Certifications

The programmes offered by NIELIT not only promote IT Education but also equip the candidates with the necessary skills to make them employable, and thus bridging the gap between demand and supply.

NIELIT has its own centres/offices at various locations throughout the country which includes Agartala, Aizawl, Ajmer, Aurangabad, Calicut, Chandigarh, Chennai, Chuchuyimlang, Churachandrapur, Delhi, Gangtok, Gorakhpur, Guwahati, Imphal, Itanagar, Jammu, Jorhat, Kokrajhar, Ranchi, Silchar, Kohima, Kolkata, Leh, Lucknow, Lunglei, Patna, Senapati, Shimla, Shillong, Srinagar and Tezpur with its Head quarters at New Delhi. Apart from its own centres, it also has a network of more than 5900 approved institutions for delivery of courses through classroom teaching for Digital Literacy courses.

Over the last three decades, NIELIT has acquired very good expertise in IT training, through its wide repertoire of courses, ranging from 'O' Level, 'A' Level, 'B' Level, 'C' Level, IT literacy courses such as CCC, BCC, Short Term Skill Development Programmes and Long Term Formal courses in association with State Universities. NIELIT is also coming up with two more courses on Digital Literacy titled CCC *Plus* and ECC.

NIELIT has also diversified in new and advanced technological areas such as GIS, Cloud Computing, Cyber Security, e-Governance and the Electronic System Design and Manufacturing Sector (ESDM).

With manpower strengths exceeding 2700 plus qualified employees, NIELIT has endeavoured to undertake Capacity Building measures to support the initiatives of the Government of India which has identified Skill Development as a priority area to reap the demographic dividend as about sixty five percent of the population in this country is below the age of 35 years.

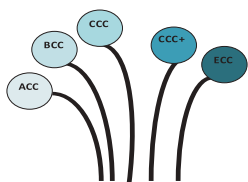
NIELIT has made deep inroads to take skill development initiatives to the nook and corner of the country through synergy and sharing of best practices. The scale of operation has been enhanced through capacity building initiatives and skilling potentials in new technological areas have been tapped. NIELIT has also endeavoured to execute its commitments with increased speed. Thus, NIELIT is also aligned with the 3 S vision of the Government, i.e., 'Skill', 'Scale' and 'Speed' defines the developmental approach of India to match other countries for making India truly a global power.

VISSION

To be the leader in the development of industry oriented quality education and training and be the country's premier Institution for examination and certification in the field of Information, Electronics and Communications Technology (IECT).

MISSION

To be the single source for quality assurance in computer education among the nation's non-formal institutes, After turning out competent IT professionals in large numbers, NIELIT reach is now being extended to all regions of the country as well as overseas.



Awareness in Computer Concepts (ACC)

OBJECTIVE: By undergoing the Awareness in Computer Concepts (ACC), one should be able to acquire basic knowledge on computer & its usage by understanding the following skills:

- How to operate the elements of a computer
- Perform operations on the computer
- Access the Internet and finding information of interest
- Register for a web-based e-mail account and use it
- Make bill payments, send money orders and use other application using Internet
- Create, edit and format documents using a word processor

COURSE DURATION: 20 hours

ELIGIBILITY: No minimum qualification is required for applying and appearing for the examination in Awareness of Computer Concepts (ACC). Certificate could be awarded to the candidates after completion of the course.

COURSE SYLLABUS of ACC:

Module1 - How to operate the elements of a computer:

Operate the elements of a computer including power chord, power switch, network connecting cable, USB ports, Mouse (click, click and drag, double click, right click (for the context menu), Keyboard (some of the more common letters, enter, backspace, shift, tab and arrows), interface icons, GUI Elements (use the menu, resize a window, minimize a window, maximize a window, move a window, locate items in Start Menu, using the scrollbar) Editing Options (copy, paste, cut, undo, redo, spell check).

Module2 - Perform operations on the computer:

Perform operations including switching on the computer, logging in, locating a file, opening a file, printing a document, storing a file with proper extension, creating a folder/sub folder in a volume on hard disk and desk top, shifting files from one folder to another, shutting off the computer under Windows O.S.

Module3 - Access the Internet and finding information of interest:

Access the Internet, use a search engine, and find information on a topic of interest.

Awareness in Computer Concepts (ACC)

Module4 - Register for a web-based e-mail account and use it:

Register for a web-based e-mail account, log in and log out of an e-mail account, access email with 2 attachments, reply to an e-mail, forward an e-mail and delete an e-mail message.

Module5 - Make bill payments, send money orders and use other application using Internet:

Make bill payments, send money orders, book train and bus tickets, bank transactions, and pension transactions, seek information on agricultural operations and land records, and interact with employment exchange, municipalities, gram panchayats, police and passport offices.

Module6 - Create, edit and format documents using a word processor:

Word Processing Basics, Creating, Editing and Formatting of text, Saving and Printing of word document

ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:

Modules		Allocated Hours
Module1	How to operate the elements of a computer	3
Module2	Perform operations on the computer	3
Module3	Access the Internet and finding information of interest	2
Module4	Register for a web-based e-mail account and use it	2
Module5	Make bill payments, send money orders and use other application using Internet	5
Module6	Create, edit and format documents using a word processor	5
	Grand Total	20

Basic Computer Course (BCC)

OBJECTIVE: The course is designed to aim at imparting a basic level appreciation programme for the common man. After completing the course the incumbent is able to use the computer for basic purposes of preparing his personnel/business letters, viewing information on Internet (the web), sending mails etc. This allows a common man or housewife to be also a part of computer users list. This would also aid the PC penetration program. This helps the small business communities, housewives to maintain their small account using the computers and enjoy in the world of Information Technology.

COURSE DURATION: 36 Hours. Theory: 10 hrs + Practical: 22 hrs. + Tutorial: 04 hrs. This course can also be offered as 06 days full time intensive course.

ELIGIBILITY: The candidates can appear in the NIELIT BCC Examination through following modes:

- Candidates sponsored by NIELIT approved Institutes which are permitted to conduct BCC Course and having obtained e-provisional no. - irrespective of any educational qualifications;
- Direct Applicants -irrespective of any educational qualification;

COURSE SYLLABUS of BCC:

Module1 - Knowing computer:

What is Computer, Basic Applications of Computer; Components of Computer System, Central Processing Unit (CPU), VDU, Keyboard and Mouse, Other input/output Devices, Computer Memory, Concepts of Hardware and Software; Concept of Computing, Data and Information; Applications of IECT; Connecting keyboard, mouse, monitor and printer to CPU and checking power supply.

Module2 - Operating Computer using GUI Based Operating System:

What is an Operating System; Basics of Popular Operating Systems; The User Interface, Using Mouse; Using right Button of the Mouse and Moving Icons on the screen, Use of Common Icons, Status Bar, Using Menu and Menu-selection, Running an Application, Viewing of File, Folders and Directories, Creating and Renaming of files and folders, Opening and closing of different Windows; Using help; Creating Short cuts, Basics of O.S Setup; Common utilities.

Module3 - Understanding Word Processing:

Word Processing Basics; Opening and Closing of documents; Text creation and Manipulation; Formatting of text; Table handling; Spell check, language setting and thesaurus; Printing of word document.

Module4 - Using Spread Sheet:

Basics of Spreadsheet; Manipulation of cells; Formulas and Functions; Editing of Spread Sheet, printing of Spread Sheet.

Basic Computer Course (BCC)**Module5 - Communication using the Internet:**

Basic of Computer networks; LAN, WAN; Concept of Internet; Applications of Internet; connecting to internet; What is ISP; Knowing the Internet; Basics of internet connectivity related troubleshooting.

Module6 - WWW and Web Browsers:

World Wide Web; Web Browsing softwares, Search Engines; Understanding URL; Domain name; IP Address; Using e-governance website.

Module7 - Communications and collaboration:

Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration; Instant Messaging; Netiquettes.

Module8 - Making Small Presentation:

Basics of presentation software; Creating Presentation; Preparation and Presentation of Slides; Slide Show; Taking printouts of presentation / handouts.

For reference only. For details see detailed syllabus.

ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:

Sl. No.	Contents	Theory	Tutorials	Practical
1.	Knowing Computer	1	1	1
2.	Operating Computer using GUI Based Operating System	2	0	4
3.	Understanding Word Processing	2	1	6
4.	Using Spread Sheet	1	1	4
5.	Communicating using the Internet	1	0	2
6.	WWW and web browsers	1	0	2
7.	Communications and Collaboration	1	0	2
8.	Making small presentation	1	1	1
	Grand Total	10	4	22

Course on Computer Concepts (CCC)

OBJECTIVE: This course is designed to aim at imparting a basic level IT Literacy programme for the common man. This programme has essentially been conceived with an idea of giving an opportunity to the common man to attain computer literacy thereby contributing to increased and speedy PC penetration in different walks of life. After completing the course the incumbent should be able to use the computer for basic purposes of preparing his personnel/business letters, viewing information on internet (the web), receiving and sending mails, preparing his business presentations, preparing small databases etc. This helps the small business communities, housewives, etc. to maintain their small accounts using the computers and enjoy in the world of Information Technology. This course is, therefore, designed to be more practical oriented.

COURSE DURATION: 80 hours

ELIGIBILITY: The candidates can appear in the NIELIT CCC Examination through following three modes and the eligibility criteria for each mode are indicated against each:

- Candidates sponsored by NIELIT approved Institutes permitted to conduct CCC Course - irrespective of any educational qualifications;
- Candidates sponsored by Government recognized Schools/Colleges having obtained an Unique Identity number from NIELIT for conducting CCC - irrespective of any educational qualifications; and
- Direct Applicants (without essentially undergoing the Accredited Course or without being sponsored by a Govt. recognised School/College) -irrespective of any educational qualification;

COURSE SYLLABUS OF CCC:

Module1 – Introduction to Computers:

What is Computer, Components of Computer System, Concept of Hardware and Software, Representation of Data/Information, Concept of Data processing, Applications of IECT, Summary, Model Questions and Answers.

Module2 – Introduction to GUI Based Operating System:

Basics of Operating System, The User Interface, Operating System Simple Setting , File and Directory Management, Types of files, Summary, Model Questions and Answers.

Module3 – Elements of Word Processing:

Objectives, Word Processing Basics, Opening and closing Documents, Text Creation and manipulation, Formatting the Text, Table Manipulation, Summary, Model Questions and Answers.

Module4 – Spread Sheet:

Introduction, Objectives, Elements of Electronic Spread Sheet, Manipulation of Cells, Function and Charts, Summary, Model Questions and Answers.

Course on Computer Concepts (CCC)**Module5 – Computer Communication and Internet:**

Introduction, Objectives, Basics of Computer Networks, Internet, Services on Internet, Preparing Computer for Internet Access, Summary, Model Questions and Answers.

Module6 – WWW and Web Browser:

Introduction, Objectives, Web Browsing Software, Configuring Web Browser, Search Engines, Summary, Model Questions and Answers.

Module7 – Communication and Collaboration:

Introduction, Objectives, Basics of E-mail, Using E-mails, Advance email features, Instant Messaging and Collaboration, Summary, Model Questions and Answers.

Module8 – Making Small Presentation:

Introduction, Objectives, Basics, Creation of Presentation, Preparation of Slides, Providing Aesthetics, Presentation of Slides, Slide Show, Summary, Model Questions and Answers.

ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:

Contents	Theory	Tutorials	Practical
Introduction to computer	2	1	4
Introduction to GUI Based Operating System	3	-	8
Elements of Word Processing	4	2	10
Spreadsheets	4	2	10
Computer communication and Internet	4	-	5
WWW and web browsers	2	-	3
Communication and Collaboration	2	-	2
Making small presentations	4	-	8
Grand Total	25	5	50

Course on Computer Concepts Plus (CCC Plus)

OBJECTIVE: The course is a certificate level course, with an aim to equip the workforce entering into / working in government sector with the vital skill set, that is, necessary to cope up with the ever-changing scenario in IT sphere. The course is designed in such a manner, so that, it not only educate an individual with the basic skill set but also enhances the ability of individual to easily grasp the new changes in the dynamic IT field. The course is aimed at skill development in masses, students, employees in professional sectors at middle level. The course may also be considered as an ideal course for re-skilling of an individual and technological advancement. After going through the course, an individual is expected to be equipped with not only the office automation skills but also with the understanding of the latest technologies and e-Gov applications.

COURSE DURATION:

126 hrs (21 days @ 6 hrs/day - Full Time or 42 days @3 hrs/day – Part Time)

ELIGIBILITY: Class X passed

Detailed Syllabus of CCC Plus

Module1 – Introduction to Computer & Basic Concepts:

- **What is Computer:** Characteristics of Computer System, Basic Applications of Computer; Processing Unit, Keyboard, mouse and VDU, Other Input devices, Other Output devices, Computer Memory;
- **Concept of Hardware and Software:** Hardware, Software, Application Software, Systems software, Programming Languages; Representation of Data/Information; Concept of Data processing;

After completing this chapter, you will be able to understand computers, understanding its components and its applications.

Module2 - Operating System:

- **Basics of Operating System:** Operating system, Basics of popular operating system (LINUX, WINDOWS);
- **The User Interface:** Task Bar, Icons, Start Menu, Running an Application;
- **Operating System Simple Setting:** Changing System Date And Time, Changing Display Properties, To Add Or Remove A Windows Component, Changing Mouse Properties, Adding and removing Printers;
- **File and Directory Management:** Types of files, What is a file, Naming conventions, File Extensions, File Pathway, Windows Explorer window, Viewing files, File property dialogue box, Explain file size (bytes, kilo, mega, giga,tera) and abbreviations used, Create a Folder, Move a file (multiple files)into a folder, Delete files and folders, Recovering deleted files, Renaming files, Searching for files, Creating and deleting shortcuts on desktop, How programs may save files in specific location by default. How to find where file is being saved;
- **Desktop:** exploring the desktop, cleaning the desktop;
- **Keep Software updated:** how to set automatic updates for windows operating system.

After completing this chapter, you will be able to understand GUI Based operating systems and its components, file management.

Course on Computer Concepts *Plus* (CCC *Plus*)

Module3 – Word Processing:

- **Word Processing Basics:** Opening Word Processing Package, Menu Bar, Using The Help, Using The Icons Below Menu Bar;
- **Opening and closing Documents:** Opening Documents, Save and Save as, Page Setup, Print Preview, Printing of Documents;
- **Text Creation and manipulation:** Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus;
- **Formatting the Text:** Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case;
- **Formatting a document:** Set page margin, paragraphs and sections within a document, Adjust indents and hanging indents;
- **Table Manipulation:** Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column Border and shading, Table Formula;
- **Inserting Graphic Elements:** Insert a clip art picture, insert symbols and special characters, adding a watermark; Using word art; adding a drop cap;
- **Mail Merge:** Using mail merge; printing mailing labels; merging for sending emails using outlook.
- 🌀 **Macros** , Use of local language

After completing this chapter, you will be able to acquire skills in Word Processing Basics.

Module4 – Spreadsheet:

- **Elements of Electronic Spread Sheet:** Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks;
- **Manipulation of Cells:** Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width;
- **Formulas and Function:** Using Formulas, Function, basic mathematical operators, using AutoSum etc., using formulas with multiple cell references, finding the right function, relative and absolute cell references, fixing formula errors; Charts: learning about charts, creating charts; Working with graphics; Clip Art; SmartArt.

After completing this chapter, you will be able to acquire skills in creating spreadsheet and its features.

Module5 – Presentation:

- **Basic Concepts of presentation:** Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation;
- **Creation of Presentation:** Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation;
- **Preparation of Slides:** Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object;
- **Presentation of Slides:** Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides And Handouts;
- **Slide Show:** Running a Slide Show, Transition and Slide Timings, Automating a Slide Show.

After completing this chapter, you will be able to acquire skills in creating and developing a presentation and its features.

Course on Computer Concepts *Plus* (CCC *Plus*)

Module6 – Database Management System:

- Introduction to the concepts of database management system; Creating a database;
- **Creating a Table:** Concepts of field, field types; entering data in a table, preview and print a table, changing row and column height; closing and opening of table, sorting of table, finding and replacing texts; using queries wizard; creating report from tables / queries from report wizard, modifying a report, printing of report; creating a form using wizard, entry in the forms; basic of formatting of forms and reports.

After completing this chapter, you will be able to acquire skills in creating and developing forms, queries and reports

Module7 – Cyber Security:

- **Cyber Security:** Basic concepts of threats, vulnerabilities, controls; risk; confidentiality, integrity, availability; security policies; security mechanisms; Data Security and protection: concept, creating strong passwords; how to stay safe when surfing on internet: “In private Browsing”, identifying secure website, clear cookies;
- **Know how to identify a secure web site:** https, lock symbol; Security Considerations: Know about security threats from web sites like: viruses, worms, Trojan horses, spyware. Understand the term malware; Netiquettes;
- **Netiquettes; Security Considerations:** Be aware of the possibility of receiving fraudulent and unsolicited e-mail; phishing, Recognize attempted phishing;
- Basics of Software Licensing
- Overview and understanding of IT Act 2000.

After completing this chapter student will be able to know about security features & vulnerabilities and will be able to secure its network from attacks.

Module8 - PC Maintenance, Security and Troubleshooting:

- **Computer Maintenance and Security:** Overview of Computer Maintenance and Security, Inbuilt PC Security, tools, Securing documents, Antivirus, Upgrading Operating System and Application software. security; Cleaning the monitor, keyboard, CPU;
- **Deleting unnecessary programs and files:** Disk cleanup, deleting toolbars; defrag hard drive;
- **Computer Maintenance Programs:** Ccleaner, myDefrag, Spinrite etc.;
- **Basic troubleshooting:** restart computer, checking cables, uninstalling a software, start windows in safe mode etc.

This unit will introduce about maintenance and troubleshooting of PC. This unit will introduce some maintenance and some troubleshooting techniques to use if there is a problem.

Module9 – Networking & Troubleshooting:

- **Basic of Computer Networks:** LAN, WAN, Wi-Fi, Broadband, Bluetooth;
- **Internet:** Concept of Internet, Applications of Internet, Connecting to the Internet, Troubleshooting; WWW, TCP/IP, DNS, Search Engine; Key web browser features, Brief about switch, router, gateway;
- **Various applications of Internet:** e-mail, information gathering, retailing etc.;
- **Methods of connecting to the Internet:** Dial up, ISDN and broadband; Brief introduction to Internet addressing, Internet protocols (TCP/IP, FTP and HTTP);
- **Define and understand the terms:** Internet Service Provider (ISP), Uniform Resource Locator (URL), hyperlink;

Course on Computer Concepts *Plus* (CCC *Plus*)

- Overview of use of search engines and e-mail messages;
- **Instant Messaging and Collaboration:** Using Instant messaging, Instant messaging providers,
- Use of Social Networking Sites viz. Facebook, Twitter etc.; Introduction to the concepts of IPv4 and IPv6 networks;
- Network troubleshooting

After completing this chapter, you will be able to understand world of internet, its advantage and understand the Internet as a powerful tool.

Module10 – Latest Trends in IECT & e-Governance:

- **Applications of IECT:** e-governance, Multimedia and Entertainment;
- Project Management using IT tools & related applications
- **Introduction to Cloud Computing:** What is cloud computing, Properties & Characteristics, Service models, Deployment models; Concepts of: IaaS (Infrastructure as a Service), PaaS (Platform as a Service), SaaS (Software as a service), DaaS (Desktop as a Service).
- Introduction to Mobile Computing, its components and characteristics.
- Digital signature: definition as per ITA 2000, how digital signature works; role of certifying authorities: Digital Certificates and their uses, Certifying Authority regulation in India, Obtaining a trial version of a Digital Certificate; legal aspect covering digital signatures in India; how to use digital signatures on electronic documents.
- **e-Governance:** Definition of e-Governance, Pillars of e-Governance, Infrastructure for e-Governance, Mission Mode Projects (At least 5), Familiarization with terminology like change management, processing engineering, Govt. Processing engineering and Governance, e-Governance project life cycle, electronically delivery of services, messaging system and case study of any 5 public utility portal related with the Department (especially, public grievance redressal system, RTI, Vigilance, Department working and financial inclusion, linkage with Aadhar etc.)

After completing this chapter, you will be able to understand the concepts of cloud computing and mobile computing, you will be able to understand the IT Act 2000 on the nature and operation of digital signatures and get an idea about e-Governance & its benefits.

Module11 – Soft Skills:

- **Effective communication:** features of effective communication;
- Communication Skills & Call Handling Skills
- **Listening skills:** Types of Listening; Tips for Effective/ Listening: Academic Listening- (lecturing), Listening to talks and Presentations, Listening to Announcements.
- Corporate culture
- Behavioral Skills
- Vocabulary Development
- Pronunciation
- Reading
- Listening And Speaking
- Writing

The objective of this Chapter is to develop the written, verbal, non-verbal, and technical communication skills.

Course on Computer Concepts *Plus* (CCC *Plus*)
ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:

Chapter	Name of the Chapter	Theory (Hrs)	Practical (Hrs)	Total (Hrs)
1.	Introduction to Computer & Basic Concepts	2	2	4
2.	Operating System	4	8	12
3.	Word Processing	4	8	12
4.	Spreadsheets	4	8	12
5.	Presentations	4	8	12
6.	Database Management Systems	4	8	12
7.	Cyber Security	5	5	10
8.	PC Maintenance & Troubleshooting	4	8	12
9.	Networking and Troubleshooting	4	8	12
10.	Latest trends in IECT & e-Governance	7	7	14
11.	Soft Skills	7	7	14
	Grand Total	49	77	126

Expert Computer Course (ECC)

OBJECTIVE: The aim of ECC is to assist a prospective entrant into a professional stream with attaining the necessary skills and knowledge needed to compete in today's competitive scenario. The focus of the course is divided amongst the following four dimensions:

1. Understanding Computer Hardware, Software and its maintenance
2. Office Automation – Disposal of daily routine jobs using Office Automation Tools
3. Exploring the wide world of Internet, and latest technologies in Online services and e-Gov applications
4. Personality development with communication skills

The course emphasizes on skill development and latest advancements in the technological world that will help an individual to build up and upgrade skills thereby closing the technological gaps.

COURSE DURATION: 200 hours

ELIGIBILITY: Class XII passed

Detailed Syllabus of ECC:

Module1 - Introduction to Computer & Basic Concepts:

- **What is Computer:** Characteristics of Computer System, Basic Applications of Computer; Processing Unit, Keyboard, mouse and VDU, Other Input devices, Other Output devices, Computer Memory;
- **Concept of Hardware and Software:** Hardware, Software, Application Software, Systems software, Programming Languages; Representation of Data/Information; Concept of Data processing;

After completing this chapter, you will be able to understand computers, understanding its components and its applications.

Module2 – Operating System:

- **Basics of Operating System:** Operating system, Basics of popular operating system (LINUX, WINDOWS);
- **The User Interface:** Task Bar, Icons, Start Menu, Running an Application- notepad, paint etc..;
- **Operating System Simple Setting:** Changing System Date And Time, Changing Display Properties, To Add Or Remove A Windows Component, Changing Mouse Properties, Adding and removing Printers;

Expert Computer Course (ECC)

- **File and Directory Management:** Types of files, What is a file, Naming conventions, File Extensions, File Pathway, Windows Explorer window, Viewing files, File property dialogue box, Explain file size (bytes, kilo, mega, giga,tera) and abbreviations used, Create a Folder, Move a file (multiple files)into a folder, Delete files and folders, Recovering deleted files, Renaming files, Searching for files, Creating and deleting shortcuts on desktop, How programs may save files in specific location by default. How to find where file is being saved;
- **Desktop:** exploring the desktop, cleaning the desktop;
- **Keep Software updated:** how to set automatic updates for windows operating system.
- *After completing this chapter, you will be able to understand GUI Based operating systems and its components, file management.*

Module3 – Basic Computer Hardware:

- Introduction,
- Getting started with PC hardware support, Electricity and power systems, CPUs and motherboards,
- Basic Input/Output System, Memory systems, Bus structures, color combination of network cable Expansion cards, Ports, connectors, and cables,
- Data storage devices,
- Video and multimedia input/output devices,
- Printers, Portable computers and devices, Connecting computers,

The objective of this Chapter is to acquaint an individual with the concepts of computer hardware.

Module4 – Word Processing:

- **Word Processing Basics:** Opening Word Processing Package, Menu Bar, Using The Help, Using The Icons Below Menu Bar;
- **Opening and closing Documents:** Opening Documents, Save and Save as, Page Setup, Print Preview, Printing of Documents;
- **Text Creation and manipulation:** Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus;
- **Formatting the Text:** Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case;
- **Formatting a document:** Set page margin, paragraphs and sections within a document, Adjust indents and hanging indents;
- **Table Manipulation:** Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column Border and shading, Table formulas;
- **Inserting Graphic Elements:** Insert a clip art picture, insert symbols and special characters, adding a watermark; Using word art; adding a drop cap;
- **Mail Merge:** Using mail merge; printing mailing labels; merging for sending emails using outlook.
- Use of local language
- Macros

After completing this chapter, you will be able to acquire skills in Word Processing Basics.

Module5 – Spreadsheet:

- **Elements of Electronic Spread Sheet:** Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks;
- **Manipulation of Cells:** Entering Text, Numbers and Dates, Creating Text, Number

Expert Computer Course (ECC)

and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width;

- **Formulas and Function:** Using Formulas, Function, basic mathematical operators, using AutoSum etc., using formulas with multiple cell references, finding the right function, relative and absolute cell references, fixing formula errors; Charts: learning about charts, creating charts; Working with graphics; Clip Art; SmartArt.
- Use of Pivot Table and Pivot Chart.

After completing this chapter, you will be able to acquire skills in creating spreadsheet and its features.

Module6 – Presentation:

- **Basic Concepts of presentation:** Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation;
- **Creation of Presentation:** Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation;
- **Preparation of Slides:** Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object;
- **Presentation of Slides:** Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides And Handouts;
- **Slide Show:** Running a Slide Show, Transition and Slide Timings, Automating a Slide Show.

After completing this chapter, you will be able to acquire skills in creating and developing a presentation and its features.

Module7 – Database Management Systems:

- Introduction to the concepts of database management system; Creating a database;
- **Creating a Table:** concepts of field, field types; entering data in a table, preview and print a table, changing row and column height; closing and opening of table, sorting of table, finding and replacing texts; using queries wizard; creating report from tables / queries from report wizard, modifying a report, printing of report; creating a form using wizard, entry in the forms; basic of formatting of forms and reports.

After completing this chapter, you will be able to acquire skills in creating and developing forms, queries and reports.

Module8 – Cyber Security:

- **Cyber Security:** Basic concepts of threats, vulnerabilities, controls; risk; confidentiality, integrity, availability; security policies; security mechanisms; Data Security and protection: concept, creating strong passwords; how to stay safe when surfing on internet: “In private Browsing”, identifying secure website, clear cookies;
- **Know how to identify a secure web site:** https, lock symbol; Security Considerations: Know about security threats from web sites like: viruses, worms, Trojan horses, spyware. Understand the term malware; Netiquettes, DOS, DDOS;
- **Netiquettes; Security Considerations:** Be aware of the possibility of receiving fraudulent and unsolicited e-mail; phishing, Recognize attempted phishing;
- Basics of Software Licensing
- Overview and understanding of IT Act 2000.

After completing this chapter student will be able to know about security features & vulnerabilities and will be able to secure its network from attacks.

Expert Computer Course (ECC)

Module9 - PC Maintenance, Security & Troubleshooting:

- **Computer Maintenance and Security:** Overview of Computer Maintenance and Security, Inbuilt PC Security, tools, Securing documents, Antivirus, Upgrading Operating System and Application software. security; Cleaning the monitor, keyboard, CPU;
- **Deleting unnecessary programs and files:** Disk cleanup, deleting toolbars; defrag hard drive;
- **Computer maintenance programs:** Ccleaner, myDefrag, Spinrite etc.;
- **Basic troubleshooting:** restart computer, checking cables, uninstalling a software, start windows in safe mode etc.
- Windows installation and upgrades, CPUs and motherboards, Memory systems, Expansion cards, Data storage devices, Ports, connectors, and cables, Printers and scanners, Display devices, Portable computers and devices, Networking, Security, Maintaining the PC environment.

This unit will introduce about maintenance and troubleshooting of PC.

Module10 – Networking & Troubleshooting:

- **Basic of Computer Networks:** LAN, WAN, Wi-Fi, Broadband, Bluetooth;
- **Internet:** Concept of Internet, Applications of Internet, Connecting to the Internet, Troubleshooting; WWW, TCP/IP, DNS, Search Engine; Key web browser features, Brief about switch, router, gateway;
- **Various applications of Internet:** e-mail, information gathering, retailing etc.;
- **Methods of connecting to the Internet:** Dial up, ISDN and broadband; Brief introduction to Internet addressing, Internet protocols (TCP/IP, FTP and HTTP);
- 🌐 **Define and understand the terms:** Internet Service Provider (ISP), Uniform Resource Locator (URL), hyperlink;
- 🌐 Internet protocols (TCP/IP, FTP and HTTP);
- 🌐 **Define and understand the terms:** Internet Service Provider (ISP), Uniform Resource Locator (URL), hyperlink;
- 🌐 Know how to identify a secure web site:https, lock symbol; Security Considerations: Know about security threats from web sites like: viruses, worms, Trojan horses, spyware.
- 🌐 Using Favorites Folder, Downloading Web Pages, Printing Web Pages, Understanding URL, Set the web browser Home Page/Start page; Bookmark a web page, Delete a bookmark, Publishing on the Web, Downloading Web Pages, Printing Web Pages; Complete a web-based form using: text boxes, drop-down menus, list boxes, check boxes, radio buttons; Understanding benefits of Search Engines and Popular Search Engines (Google, Alta Vista, Excite);
- Commerce on Internet, Impact of Internet on Society.
- Overview of use of search engines and e-mail messages;
- **Instant Messaging and Collaboration:** Using Instant messaging, Instant messaging providers,
- Use of Social Networking Sites viz. Facebook, Twitter etc.; Introduction to the concepts of IPv4 and IPv6 networks;
- Network troubleshooting

Module11 - Latest trends in IECT & e-Governance:

- **Applications of IECT:** e-governance, Multimedia and Entertainment;
- Project Management using IT tools & related applications

Expert Computer Course (ECC)

- **Introduction to Cloud Computing:** What is cloud computing, Properties & Characteristics, Service models, Deployment models; Concepts of: IaaS (Infrastructure as a Service), PaaS (Platform as a Service), SaaS (Software as a service), DaaS (Desktop as a Service).
- Introduction to Mobile Computing, its components and characteristics.
- **Digital signature:** definition as per ITA 2000, how digital signature works; role of certifying authorities: Digital Certificates and their uses, Certifying Authority regulation in India, Obtaining a trial version of a Digital Certificate; legal aspect covering digital signatures in India; how to use digital signatures on electronic documents. Legal aspects covering digital signatures in India.
- **e-Governance:** Definition of e-Governance, Pillars of e-Governance, Infrastructure for e-Governance, Mission Mode Projects (At least 5), Familiarization with terminology like change management, processing engineering, Govt. Processing engineering and Governance, e-Governance project life cycle, electronically delivery of services, messaging system and case study of any 5 public utility portal related with the Department (especially, public grievance redressal system, RTI, Vigilance, Department working and financial inclusion, linkage with Aadhar etc.)

After completing this chapter, you will be able to understand the concepts of cloud computing and mobile computing, you will be able to understand the IT Act 2000 on the nature and operation of digital signatures and get an idea about e-Governance & its benefits.

Module12 – Soft Skills:

- **Effective communication:** features of effective communication;
- Communication Skills & Call Handling Skills
- **Listening Skills:** Types of Listening; Tips for Effective Listening: Academic Listening- (lecturing), Listening to Talks and Presentations, Listening to Announcements.
- Corporate culture
- CRM Concepts
- Selling skills
- Behavioral Skills
- Vocabulary Development
- Pronunciation
- Reading
- Listening And Speaking
- Writing
- Integrated Skills
- Non-Verbal Communication

The objective of this Chapter is to develop the written, verbal, non-verbal, and technical communication skills.

Module13 - ELECTRONIC MAIL – A detailed view:

- **Basics of E-mail:** What is an Electronic Mail,
- **Mailbox:** Inbox and Outbox, Creating and Sending a new E-mail, Forwarding an E-mail message, Sorting and Searching emails, Document collaboration; instant Messaging and Collaboration: Using Instant messaging, Instant messaging providers, Netiquettes;
- Configuring mail on mobile, creating groups, message formations, do's & don't using mobile, attachment, difference between Bcc & Cc
- **Email Protocols:** SMTP, POP3, IMAP4, MIME5; Email Clients: Netscape mail clients, Outlook Express, web based E-mail; Email encryption.

Expert Computer Course (ECC)

The objective of this Chapter is to develop the skills to effectively compose emails and its features.

Module14 – Introduction to Multimedia:

- Basic concepts, Hardware requirement for multimedia computer; Textual information;
- **Components of Multimedia:** Images and their types, Animation, Digital audio, Digital Video Software for Multimedia, Introduction to MS-Publisher and Photodraw, Developing simple application and presentations using MS-Publisher.

The objective of this Chapter is to understand the concepts of multimedia and building small applications/presentations using multimedia.

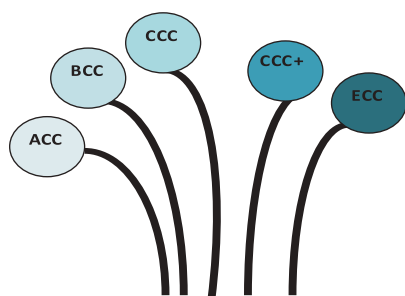
Module15 – HTML Programming Basics:

- Concepts of HTML page structure,
- FrontPage / Interdev
- HTML text, HTML Links, Using CSS, Using tables,
- HTML document tables,
- HTML frames,
- HTML images,

The objective of this chapter is to develop the understanding of HTML.

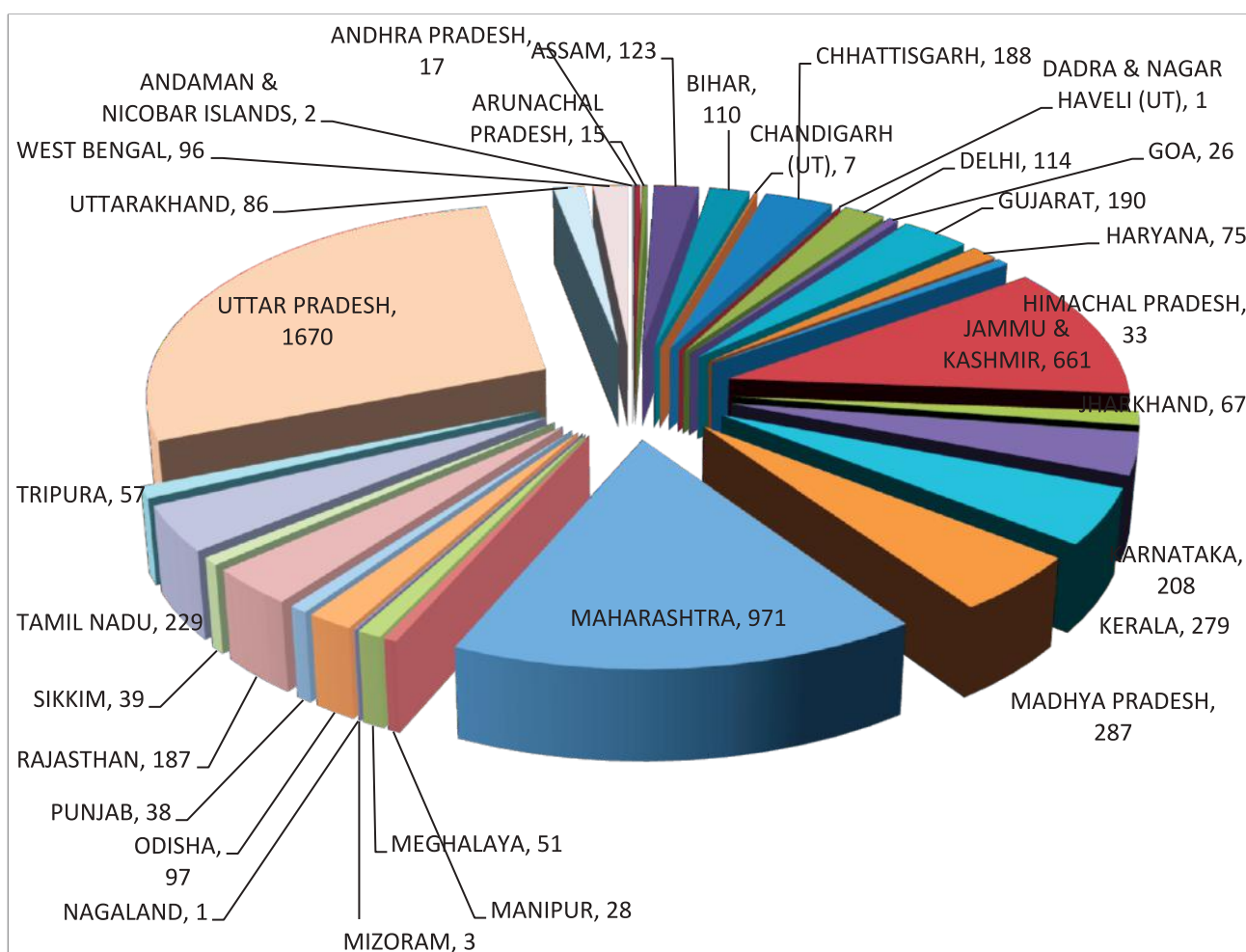
ALLOCATION OF TOTAL HOURS FOR EACH CHAPTER:

Chapter	Name of the Chapter	Theory (Hrs)	Practical (Hrs)	Total (Hrs)
1.	Introduction to Computer & Basic Concepts	3	6	9
2.	Operating System	3	6	9
3.	Basic Computer Hardware	5	10	15
4.	Word Processing	5	10	15
5.	Spreadsheets	5	10	15
6.	Presentations	5	10	15
7.	Database Management Systems	4	8	12
8.	Cyber Security	6	6	12
9.	PC maintenance, security & troubleshooting	5	10	15
10.	Networking and troubleshooting	4	8	12
11.	Latest trends in IECT & e-Governance	5	10	15
12.	Soft Skills	9	9	18
13.	Electronic Mail □ A detailed view	4	8	12
14.	Introduction to Multimedia	5	9	14
15.	HTML Programming Basics	4	8	12
	Grand Total	72	128	200



The courses are available for learning in the following modes:

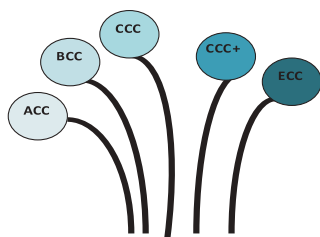
Class room teaching through network of approved institutions : The Course would be taught at the approved institutes of NIELIT, permitted to conduct BCC and/or CCC Course i.e. more than 5900 locations PAN India.



Self study through E-learning: The course material for the CCC is available in the e-learning mode on the website of NIELIT for self-study. The course content of the remaining courses / proposed courses under Digital Literacy umbrella are under development and would be soon available on e-learning platform.

Chapter 4.

Examination and Certification System for BCC & CCC



NIELIT has been conducting online examinations of its IT literacy course viz. CCC since year 2003. Later on, after launch of BCC in the year 2010, the first PAN India online examination of BCC was conducted in July 2011.

Eligibility Criteria

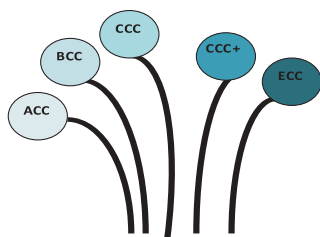
The candidates can appear in the NIELIT's CCC and BCC Examination either through NIELIT approved Institutes which are permitted to conduct BCC /CCC Course or as Direct applicant. No minimum educational criteria have been prescribed for applying for BCC and CCC Examinations.

Examinations Methodology

- ✓ Frequency: The examinations of the course are conducted in every month commencing from 1st Saturday.
- ✓ Pattern of Examination: CCC examination comprises of 100 objective type questions and certificate is awarded to the candidates who secure a minimum of 50 percent marks. BCC examination comprises of 50 objective type questions and certificate is awarded to the candidates who secure a minimum of 40 percent marks.
- ✓ Methodology: The examinations are conducted in online mode PAN India.
- ✓ Language of Question Paper: At present, examinations are conducted in Hindi/English.
- ✓ Till date more than 17 lakh candidates appeared in CCC Examination and more than 10 lakh candidates have qualified CCC Examination.
- ✓ Till date more than 2.9 lakh candidates appeared in BCC Examination and more than 1.7 lakh candidates have qualified BCC Examination.

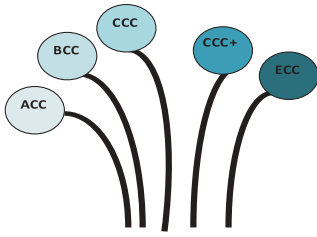
Online services being offered to candidates / institutes

- ✓ Online examination form submission and fee payment.
- ✓ Online examination of the courses on PAN India basis.
- ✓ Online availability of learning material (CCC) in Indian 25 languages, free of cost (presently being re-casted).
- ✓ Online issue of digitally signed provisional certificates embedded with QR code.

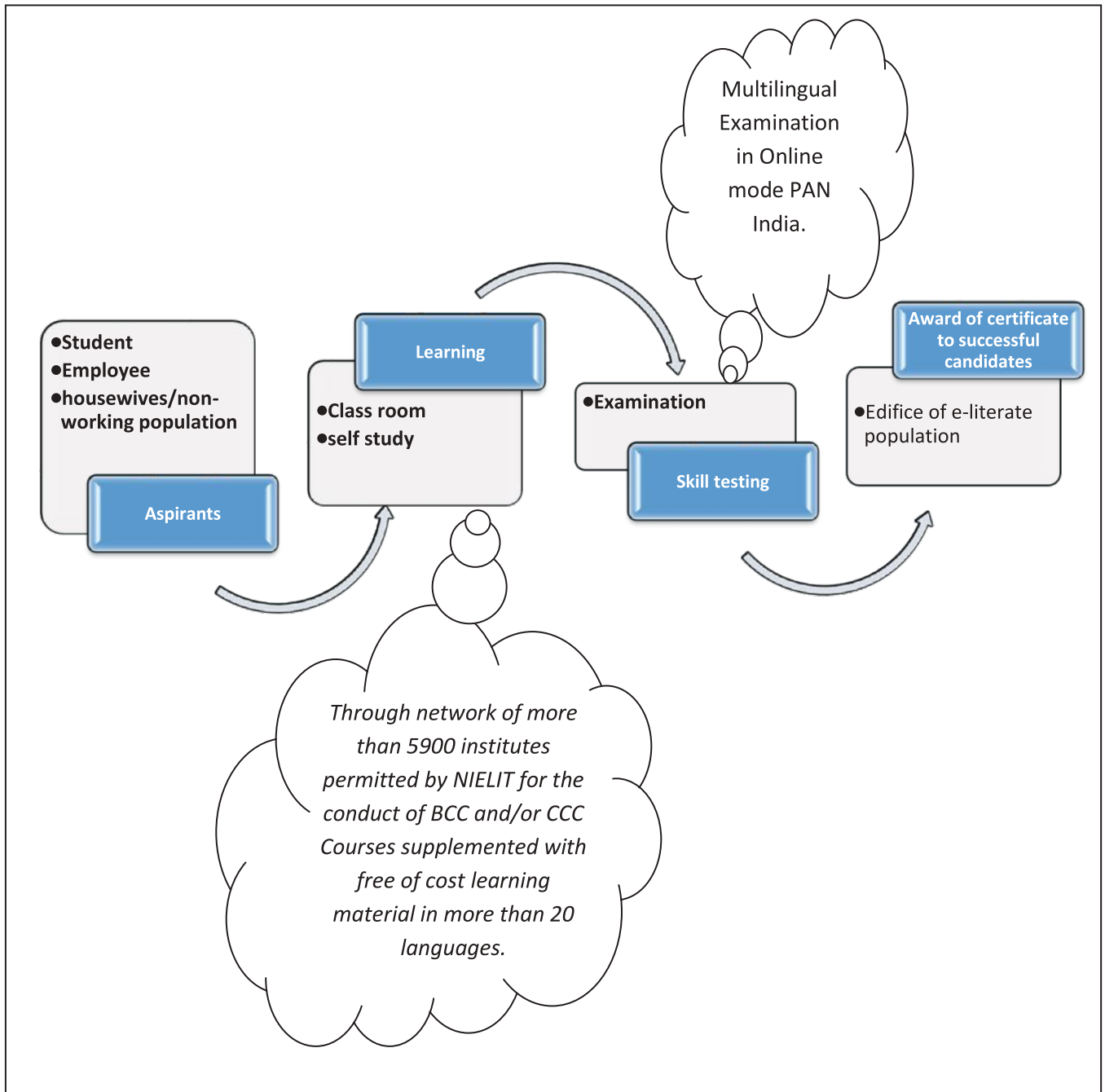


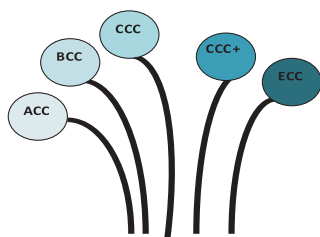
A few recognition of the certification of BCC and CCC are tabulated below:

Course on Computer Concepts (CCC)	Basic Computer Course (BCC)
<ul style="list-style-type: none"> ● Recognized by Maharashtra State Government under its Computer Literacy Programme. As per Maharashtra State Government Computer Literacy Programme, passing of CCC Course a mandatory requirement for Promotions as well as for appearing in any MPSC. ● Government of Gujarat recognized, CCC course for recruitment and promotion purposes in various state Govt. Departments Vide Notification No. GS/39/2005/CRR/102003/672(I)/PART-II/G-2. ● Controller General of Accounts recognized CCC course for Junior Accounts Officer (Civil) Examination vide Notification no. a-34012/2306/2006/Computer Exam/MF CGA (E)/95 dated 04.09.2006 ● Government of Uttar Pradesh recognized the CCC Course for recruitment and promotion purposes for the post of Stenographer Grade-II Vide Notification no. 107/22-I-2007-107/97 dated 14.02.2007. Post of Technician in Uttar Pradesh Power Corporation Limited, Village Development Officer etc. ● Recognized by Arunachal Pradesh Government vide Notification dated 05-05-2014 as mandatory for Direct Recruitment for the post with PB-2 or above scale-UDC and Stenographer. ● Apart from above, many other Government departments are also accepting CCC certificate (on suo moto basis) as a qualification that ensures computer proficiency for recruitment to various posts and services. 	<ul style="list-style-type: none"> ● The NIELITs' BCC course and certificate has been approved by DGE&T, vide its notification no. DGE&T-19(19)2010-CS dated 15-10-2010 as one of the approved IT literacy course for trainees of ITIs/ITCs under CTS. ● The State Government of Bihar has recognized BCC for grant of increment and/or other incentives to its employees in certain cadres/departments. ● The State Government of Sikkim has approved BCC certification as an additional eligibility condition for appointment to posts in PD (5200-20200) GP 2000 and above. The condition is not applicable to applicants who have studied Computer Information Technology as a subject in Class X Examination Board Exam/Recognized Diploma/Degree. ● Recognized by Arunachal Pradesh Government vide Notification dated 05-05-2014 as a pre-requisite for Government of Arunachal Pradesh jobs with PB-I scale-LDC.



TRANSFORMATION OF E-ILLITERATE POPULATION TO E-LITERATE POPULATION AND BUILDING THE DIGITAL DIVIDE





Chapter 6.

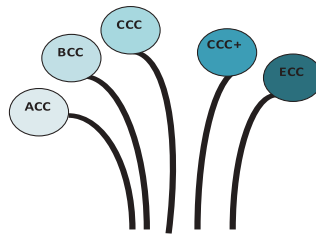
Standardized Short Term Courses (H/W & S/W) and courses under ESDM

NIELIT has also standardized Short Term Courses in Hardware & Software so as to cater to the need of the professionals and incumbent in the industry. With a vision to scale up the availability of these courses PAN India through its network of institutes, at present, these courses are being offered only at NIELIT centres/offices. The list of the courses is tabulated below:

IT & Software	
Group Name	Course Name
Office Automation and Soft Skills	Certificate Course in Office Automation and Soft Skills
Office Automation and Soft Skills	Certificate Course in Soft Skills and Communicative English
Internet and Web Design	Certificate Course in Web Designing
Internet and Web Design	Certificate Course in Advanced Development using PHP
Desk Top Publishing	Certificate course in Desk top Publishing
Financial Accounting	Certificate Course in Financial Accounting using Tally
Information Security / Cyber Law	Certificate Course in Information Security & Cyber Law
Information Security / Cyber Law	Certificate Course in Cyber Forensic
Information Security / Cyber Law	Diploma in Cyber Law
Information Security / Cyber Law	PG Diploma in Information System Security
Dot NET	Certificate Course in Advanced Dot NET
Dot NET	Certificate Course in ASP Dot NET with VB Dot Net
Dot NET	Certificate Course in ASP Dot with C#
Dot NET	Diploma in Advanced Dot NET MVC
Dot NET	Advanced Diploma in Dot NET Technologies
Programming Courses	Certificate Course in programming through C Language
Programming Courses	Certificate Course in programming in C++
Java	Certificate Course in Core Java
Java	Certificate Course in Advance Java (J2EE)
Java	Advanced Diploma in J2EE
Oracle SQL and PL/SQL, Oracle DBA	Certificate Course in Oracle SQL and PL/SQL
Oracle SQL and PL/SQL, Oracle DBA	Certificate Course in Oracle DBA
Multimedia and Animation	Certificate Course in Graphic Designing
Multimedia and Animation	Certificate Course in Audio and Video Editing
Multimedia and Animation	Certificate Course in 2D Animation using Flash
Multimedia and Animation	Diploma in introduction Multimedia Developer
Bioinformatics	Certificate Course in Bioinformatics with Project
Bioinformatics	Advanced Diploma in Bioinformatics
Mobile Application Development using Android/Phonegap	Certificate Course in Mobile Application Development using Android
Mobile Application Development using Android/Phonegap	Certificate Course in Mobile Application Development using Phonegap
System Administration using Unix / Linux/Windows Server	Certificate Course in System Administration using Unix
System Administration using Unix / Linux/Windows Server	Certificate Course in System Administration using Linux
System Administration using Unix / Linux/Windows Server	Certificate Course in System Administration using Windows Server
Cloud Computing	Certificate Course in Cloud Computing
Linux, Apache, MySQL and PHP	Certificate Course in Linux, Apache, MySQL and PHP

Hardware	
Group Name	Course Name
Hardware and Networking	Certificate course in PC Hardware & Networking
Hardware and Networking	Certificate Course in Network Administration
Hardware and Networking	Diploma in Computer Application and Network Administration
Hardware Repair and Maintenance	Certificate Course in Repair & Maintenance of Electronic Products
Hardware Repair and Maintenance	Certificate Course in repair & Maintenance of Medical Electronics
Hardware Repair and Maintenance	Certificate Course in PC Assembly and Maintenance
Hardware Repair and Maintenance	Certificate Course in Mobile Repair and Maintenance
Hardware Repair and Maintenance	Advanced Diploma in Repair and Maintenance of Medical Equipment
Embedded System	Certificate Course in Embedded System Design using 8051 microcontroller
Embedded System	Certificate Course in Embedded System Design using PIC microcontroller
Embedded System	Certificate Course in Embedded System Design using ARM/Cortex Microcontroller
Embedded System	Certificate Course in DSP using MATLAB
Embedded System	Certificate course in Embedded System Design using 8051 & ARM/Cortex Microcontroller
Embedded System	Certificate Course in Integrated Embedded & VLSI System Design
Embedded System	Certificate Course in Digital Signal and Image Processing
Embedded System	PG Diploma in Embedded System Design
Embedded System	PG Diploma in Embedded Wireless & Mobile Applications
VLSI / PCB Design	Certificate Course in VLSI Design
VLSI / PCB Design	Diploma in VLSI Design
VLSI / PCB Design	PG Diploma in VLSI & Embedded Hardware Design
VLSI / PCB Design	PG Diploma in ASIC Design and Verification
Auto CAD / Industrial Automation	Certificate Course in Auto CAD
Auto CAD / Industrial Automation	Certificate Course in Finite Element Analysis using ANSYS
Auto CAD / Industrial Automation	Certificate Course in CAD, Drafting and 3D Modelling
Auto CAD / Industrial Automation	Certificate Course in CNC Machine Tools and NC Part Programming
Auto CAD / Industrial Automation	Certificate Course in MasterCAM
Auto CAD / Industrial Automation	Advanced Diploma in CAD/CAM
Auto CAD / Industrial Automation	Advanced Diploma in PLC/SCADA/DCS Engineer
Auto CAD / Industrial Automation	PG Diploma in Industrial Automation System Design
Auto CAD / Industrial Automation	PG Diploma in CAD/CAM

COURSES UNDER ESDM SCHEME			
Name of the Course	Vertical Name	Level	Learning outcomes
Diploma in Installation & Repair of Consumer Electronics Products	Consumer Electronics	L4	Will cover installation, R&M of TV, cable TV, DTH services, FM radio, hair dryer, induction stove etc.
Certificate Course in Electronic Product Testing	Electronic Product Design	L3	Use of tools & test & measuring equipment, fault diagnosis etc of electronics equipment. Understanding of product manuals.
Diploma in Repair & Maintenance of Industrial Instrumentation & Automation System	Industrial Automation	L5	Understand trade related codes & standards; identify instruments in plants; demonstrate working of different field instruments; develop & test PLC programs etc.
Repair & Maintenance of Power Supply, Inverter & UPS	Industrial Electronics	L3	This is a popular household equipment R&M course.
Repair & Maintenance of Dental equipment	Medical Electronics	L3	Popular course being successfully run in J&K and has a wide scope in the entire country
Repair & Maintenance of Imaging Equipment (X-Ray & Ultrasound machine)	Medical Electronics	L3	Popular course being successfully run in J&K and has a wide scope in the entire country
Repair & Maintenance of ECG and ICCU Equipment	Medical Electronics	L3	Popular course being successfully run in J&K and has a wide scope in the entire country
Post Diploma in Repair & Maintenance of Hospital Equipment	Medical Electronics	L5	Popular course being successfully run in J&K and has a wide scope in the entire country
Installation & Maintenance of Photocopiers and Printers	Office Automation	L1	This is a course that will provide knowledge about the basic equipment which are widely used.



Bibliography

Websites :

- http://www.bced.gov.bc.ca/dist_learning/dig_lit_standards.htm
- <http://en.wikipedia.org>
- "Online shopping touched new heights in India in 2012". Hindustan Times. 31 December 2012. Retrieved 31 December 2012. "Internet World Stats". Internet World Stats. Retrieved 2013-07-04.

NIELIT Centres

North Zone

- ✓ NIELIT CENTRE AJMER : Jain Palace, Sapnda Road, Kekri, District Ajmer -305404, Rajasthan.
- ✓ NIELIT CENTRE CHANDIGARH: C-134, Phase 8, Industrial Area, Mohali , Chandigarh – 160071.
- ✓ NIELIT CENTRE CHANDIGARH (SHIMLA BRANCH):Hotel Cedarwood Building, Jakhoo Road, Shimla -171001, Himachal Pradesh.
- ✓ NIELIT CENTRE DELHI :2nd Floor, Parsvnath Metro Mall, Inderlok Metro Station, Inderlok, Delhi-110052.
- ✓ NIELIT CENTRE GORAKHPUR:M.M.M. Engg. College Campus, Deoria Road, Gorakhpur-273010, Uttar Pradesh.
- ✓ NIELIT CENTRE GORAKHPUR (LUCKNOW BRANCH):Sumit Complex, A-1/9, Vibhuti Khand, Gomti Nagar, Lucknow -226010, Uttar Pradesh.
- ✓ NIELIT CENTRE JAMMU:New Campus University of Jammu, Dr. BR Ambedkar Road, Jammu-180004, Jammu & Kashmir.
- ✓ NIELIT CENTRE LEH: S.P.Complex, Skalzangling, Below FCI Godown, Airport road, Leh Ladakh- 194101, Jammu & Kashmir.
- ✓ NIELIT CENTRE PATNA:13th Floor A-5 Biscoman Tower,Gandhi Maidan, Patna-800001, Bihar.
- ✓ NIELIT CENTRE SRINAGAR:Sidco Electronics Complex, Old Airport Road, Rangreth, Srinagar-190007, Jammu & Kashmir.

North-East Zone

- ✓ NIELIT CENTRE AGARTALA:Directorate of Information Technology (Govt. of Tripura) Campus, ITI Road, Indranagar, Agartala – 799 006, West Tripura, Tripura .
- ✓ NIELIT CENTRE AIZAWL:Industrial Estate, Zuangtui, Aizawl-796017, Mizoram.
- ✓ NIELIT AIZAWL (LUNGLEI EXTENSION CENTRE):NIELIT Extension Centre, Lunglei, IIDC Complex, Pukpui, Lunglei - 796691, Mizoram.
- ✓ NIELIT CENTRE GANGTOK:Indira Bypass Road, Sichey, Neare K.B.T Fuel(Petrol Pump), Gangtok – 737101, Sikkim.
- ✓ NIELIT CENTRE GUWAHATI : *Guwahati main centre*: 1st & 2nd Floor, Vittiya Bhavan,AFC Building, Md. Shah Road Paltan Bazar, Guwahati - 781008, Assam, *NIELIT Guwahati –City Centre*: 2nd Floor , AIRT&SC Campus, NH-37, Jawahar Nagar, Khanapara, Guwahati- 781 022, Assam.
- ✓ NIELIT GUWAHATI (KOKRAJHAR EXTENSION CENTRE): J. D. Road, Tengapara, Above SBI North Kokrajhar Branch, Kokrajhar - 783370, Assam.
- ✓ NIELIT GUWAHATI (SILCHAR EXTENSION CENTRE): 1st Floor, ISBT, Ramanagar,Silchar - 781015, Assam.
- ✓ NIELIT GUWAHATI (JORHAT EXTENSION CENTRE): 1st Floor, ISBT, Kotokipukhuri, Tarajan, Jorhat - 785 001, Assam.
- ✓ NIELIT CENTRE ITANAGAR : Shiv Mandir Road, E-Sector,Nahurlagun, Itanagar -791110, Arunachal Pradesh .
- ✓ NIELIT CENTRE IMPHAL : Akampat,Post Box No.104, Imphal-795001, Manipur.
- ✓ NIELIT CENTRE IMPHAL (CHURACHANDPUR EXTENSION CENTRE): Hill Town, Opposite Laitui Pharmacy, Churachandpur- 795128, Manipur.
- ✓ NIELIT CENTRE KOHIMA :Meriema, Below New High Court Complex, Post Box No. 733, Kohima – 797001, Nagaland.
- ✓ NIELIT CENTRE KOHIMA (EXTENSION CENTRE CHUCHUYIMLANG):Nagaland Gandhi Ashram, NH-61,Chuchuyimlang, Mokokchung District - 798614, Nagaland.
- ✓ NIELIT SENAPATI EXTENSION CENTRE : Angkailongdi, Senapati – 795106, Manipur.
- ✓ NIELIT CENTRE SHILLONG: 2nd Floor, Meghalaya State Housing, Financing Co-operative Society, (MSHFCS) Limited Building, Behind Bethany Hospital, Nongrim Hills, Shillong – 793003, Meghalaya.
- ✓ NIELIT CENTRE TEZPUR: 2nd Floor , ICCW Building, N.T. Road, Near Civil Hospital, Tezpur-784001, Assam.

EAST ZONE

- ✓ NIELIT CENTRE KOLKATA:Jadavpur University Campus, Kolkata-700 032, West Bengal.
- ✓ NIELIT CENTRE RANCHI : Riada Bhawan, Namkum Industrial area, Ranchi-834010, Jharkhand.

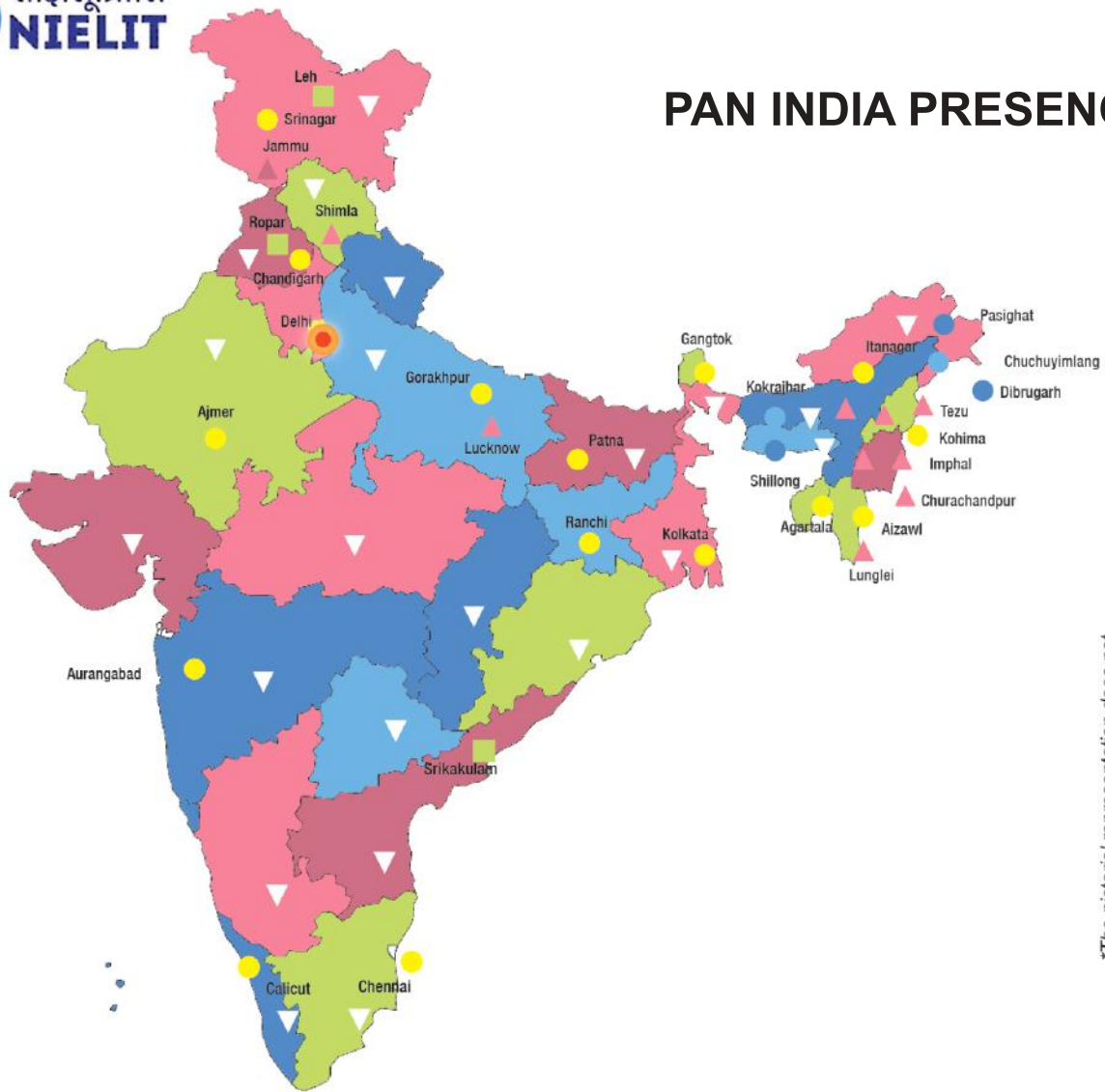
SOUTH ZONE

- ✓ NIELIT CENTRE CALICUT : Post Box No:5, NIT Campus P.O., Calicut-673601, Kerala.
- ✓ NIELIT CENTRE CHENNAI :25, ISTE Complex, Gandhimandapam Road, Anna University Campus, Chennai- 600025, Tamil Nadu.

WEST ZONE

- ✓ NIELIT CENTRE AURANGABAD: CEDTI Complex, University Campus, Aurangabad-431004, Maharashtra.

PAN INDIA PRESENCE



*The pictorial representation does not purport to be the political map of India

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