Basic Literacy & Certificate Courses on Cyber Security

Capacity building of citizens in Cyber Security under Digital India

www.nielit.gov.in

@NIELITIndia
In the coming years, India is set to become a global hub for providing cyber security solutions.

Capacity building in cyber security is need of the hour.

India needs a cyber workforce as an enabling national asset to meet domestic as well as global cyber security demands.

Digital India, Make in India and Skill India are the main programs which will bring a remarkable change in the country.

"I dream of Digital India Where Cyber Security Becomes an integral part of our National Security"
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About NIELIT

National Institute of Electronics and Information Technology (NIELIT), formerly known as DOEACC Society, was set up in the year 1994 as DOEACC Society. Subsequently, in 2002, several centers of CEDTI and RCC were merged with the then DOEACC Society, and a new chapter was added in its history. NIELIT is dedicated to 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 programs 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. At present, NIELIT has thirty six (36) offices located at Agartala, Aizawl, Ajmer, Aurangabad, Calicut, Chandigarh, Chennai, Chuchuyimlang, Churachandpur, Delhi, Gangtok, Gorakhpur, Guwahati, Imphal, Itanagar, Jammu, Jorhat, Kohima, Kolkata, Kokrajhar, Kurukshetra, Leh, Lucknow, Lunglei, Pasighat, Patna, Ranchi, Ropar (Rupnagar City Centre), Senapati, Shillong, Shimla, Silchar, Srinagar, Srikakulam, Tezpur, Tura with its Head quarters at New Delhi. Apart from its own centers, it also has a network of more than 8500+ approved institutions for delivery of courses through classroom teaching for Digital Literacy courses.

NIELIT has acquired 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 ECC, CCC+, CCC, BCC, ACC Short Term Skill Development Programs and Long Term Formal courses in association with State Universities. 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 endeavored 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 endeavored 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' which defines the development approach of India to match other countries for making India truly a global power.

**VISION**

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.
Introduction to Cyber Security

**Background**

India is on its way of becoming a digital nation by launching of a flagship Programme 'Digital India' by the Govt. with a vast vision to transform India into a digitally empowered society. Under the 'Digital India' Programme, e-Commerce and e-Governance will get maximum boost. Riding on the Information and Communication Technology backbones, everyone in digital India from government institutions to private companies to citizens will be using computer networks and smart phones for all their work.

The Internet has undergone astounding growth. As per the Internet Live Stats, there are 3.5 billion internet users across worldwide out of which about 462 million plus users are in India and growth rate of internet users in India is 31% which is highest in the world. By year 2020, the expected Internet users in India will cross one billion mark. Similarly the Smartphone penetration in India will touch 1.4 billion mark by 2020.

Cyber attacks on Internet commerce, vital business sectors and government agencies are growing exponentially. There are 113 Million Computer Frauds and Cyber Crimes reported in 2015 as per Norton Security 2015 Report of Cyber Crime. India is also among top 5 countries in case of Ransomware Attack. After land, air, sea and space, cyber has now become the fifth domain for attacks and warfare. Cyber terrorism is also a reality now a days. Cyber crime in India is on the rise and preparedness for cyber security by Indian organization and citizens is far from a satisfactory move. The Hon’ble Prime Minister has also flagged cyber-related risks as a global threat of "bloodless war," and called upon the nation's IT organizations to serve the entire world by building credible cyber-security systems.

There are serious gaps in our cyber security frame work such as shortage of skilled cyber security professionals, insufficient preparedness to detect cyber crimes, negligible cyber intelligence, lack of comprehensive cyber security laws, absence of nationwide cyber security awareness etc. As per Central Statistical Office(CSO), the demand for IT Security professionals is expected to rise to 6 million globally by 2019. However, there is projected shortfall of 1.5 million IT security professionals. **In India alone, there is a shortage of about 5 Lakh Cyber Security Professionals.** To bridge this gap, skills for cyber security needs to be developed at various levels for the citizens as well as for organizations.

**What is Cyber Security**

Cyber security is known as Information Technology security. It enables protecting computers, networks, programs and data from unintended or unauthorized access, change or destruction. Cyber security is also defined as the protection of systems, networks and data in cyberspace – is a critical issue for all businesses. Cyber security will only become more important as more devices, are connected.
to the internet. Cyber criminals control remotely, in what is called “automation at a distance”, using numerous means of attack available, which mostly fall under the umbrella term of malware (malicious software). These include:

- **Viruses**
  - **Purpose:** Gain access to, steal, modify and/or corrupt information and files.
  - **Method:** A small piece of software program that can reproduce itself and spread from one computer to another by attaching itself.

- **Worms**
  - **Purpose:** By exploiting weaknesses in operating systems, worms seek to damage networks and often deliver payloads which allow remote control of the infected computer.
  - **Method:** Worms are self-replicating and do not require a program to attach themselves to.

- **Spyware/Adware**
  - **Purpose:** To take control of your computer to collect personal information without knowledge.
  - **Method:** By opening attachments, clicking links or downloading infected software, spyware/adware is installed on your computer.

- **Trojan Horse**
  - **Purpose:** To create a ‘backdoor’ on your computer by which information can be stolen and damaged.
  - **Method:** A software program appears to perform one function but actually acts as something else.

There are also a number of attack routes available to cyber criminals which allow them to infect computers with malware or to harvest stolen data:

- **Phishing**
  - An attempt to obtain user’s information such as usernames, passwords and credit card details.

- **Pharming**
  - An attack to redirect a form of online fraud like fake website, where the individuals' information is then compromised. It is also similar as phishing.

- **MITM**
  - 'Man in the middle attack', where a middleman perform each endpoint and is thus able to manipulate both victims.

**Demand Versus Supply**

Cyber attacks on Internet commerce, vital business sectors and government agencies have grown exponentially. There are 113 Million Computer Frauds and Cyber Crimes reported in 2015 as per Norton Security 2015 Report of Cyber Crime. India is also among top 5 countries in case of Ransomware Attack. After land, air, sea and space, cyber has now become the fifth domain for attacks and warfare. Lack of online safety leads to cyber bullying along with vigilance by cyber criminals which further leads them to commit crimes. Cyber terrorism is also a reality now a days. Cyber crime in India is on the rise and preparedness for cyber security by Indian organization and citizens is far from a satisfactory move.
There are serious gaps in our cyber security frame work such as shortage of skilled cyber security professionals, insufficient preparedness to detect cyber crimes, negligible cyber intelligence, lack of comprehensive cyber security laws, absence of nationwide cyber security awareness etc. As per CSO, the demand for IT Security professionals is expected to rise to 6 million globally by 2019. However, there is projected shortfall of 1.5 million IT security professionals. In India alone there is a shortage of about 5.0 lakh Cyber Security professionals. To bridge this gap, skills for cyber security needs to be developed at various levels for the citizens as well as for organizations.

**Skilling in Cyber/Information Security by NIELIT**

NIELIT has been playing a pivotal role in the capacity building in the area of Cyber/ Information Security & Cyber Law through its various courses and awareness programmes. NIELIT is also implementing a National Level Certification Scheme for Information Systems Security Professionals since 2010-11 under Information Security Education & Awareness (ISEA) with NIELIT Gorakhpur as Nodal Centre. The scheme consists of three levels namely:

- **Level 1-** Certified System Security Analyst (CSSA) - 480 hours
- **Level 2-** Certified System Security Professional (CSSP) - 480 hours
- **Level 3-** Certified Computer Forensic Professionals (CCFP)/ Certified Information System Security Auditor (CISSA)/ Certified System Security Solution Designer (CSSD) - 960 hours
Basic Literacy & Certificate Courses of NIELIT in Cyber Security

Introduction

The objective of the launching of these courses is to promulgate the Indian citizens/organizations about the threats in cyber space and equip them with the necessary knowledge in respect of security awareness by launching courses in the area of Cyber Security for various levels i.e. school level/public level/ Govt. official level/professional level.

To achieve the aim, NIELIT is providing a platform to a segment of population by its Cyber Security Basic Literacy Course(CSBLC)-20 hours and Certificate course in Cyber Security(CCCS)-200 hrs.

NIELIT's Basic Literacy and Certificate programmes on Cyber Security:-

- **Cyber Security Basic Literacy Course (CSBLC)**

  **Objective:** By undergoing the Cyber Security Basic Literacy Course (CSBLC), one should be able to acquire basic knowledge of handling computer & following types of security threats:
  
  - Respond to resolve, and recover from cyber incidents and attacks through timely information sharing, collaboration and action
  - Establish a legal and regulatory framework to enable a safe and vibrant cyberspace
  - Cyber security
  - Cyber safety
  - Data privacy
  - General Computer Security Concepts
  - Internet Safety
  - Wireless Security
  - Filtering Services

*Candidates who don't possess the requisite minimum qualification should be at least Graduate with Computer Knowledge and for such candidates passing a qualifying test will be mandatory.
Course Duration: 20 Hours

Eligibility: 12th pass with basic computer knowledge.

Course Syllabus:

I. Introduction to Computer and Computer Network
   - Fundamentals of Computer Network
   - Do's and Don'ts about Computer
   - Computer Peripherals
   - Internet
   - Search Engines, Web Browsers

II. Introduction to Cyber Security and Threats
   - Importance of Cyber Security
   - Computer Ethics
   - Threats (Virus, Worms, Trojan Horse, Malware, Ransom ware, Identity theft etc.)
   - Torrent and infected websites

III. General Computer Security Concepts
   - Data Security
   - Mobile Device Security
   - User Security, File Security
   - Password Security
   - Encryption, Decryption
   - Digital Signature
   - Firewall, Configuring Windows Firewall
   - Antivirus
   - Cyber Security Policy

IV. How to use Internet Safely
   - Email usage best practices
   - How to view E-mail Header
   - Spam Filter
   - Safe Downloading
   - Online Banking
   - Online Shopping
   - Social Engineering
   - Phishing, VoIP phishing
   - How to secure Web Browser

V. Wireless Security
   - Unsecured Wi-Fi
   - Risk of Using Unsecured Wi-Fi
   - How to Secure use of Wi-Fi
   - Bluetooth and its security

VI. Filtering Services
   - Filtering Services in Web Browser
   - Parental Control Bars
   - Procedure for Installing Parental Control Bar
   - Changing the Parental Control
   - Settings in the Parental Control Tool Bar
Certificate Course in Cyber Security (CCCS)

Objective: The aim of CCCS course is to assist a prospective candidate to enter into a professional stream with attaining the necessary skills and knowledge required by every organization for protecting them from Cyber attacks. The pass-outs may fit in the job roles such as Cyber Security Consultants, Cyber Security Analyst (Entry Level), Cyber Security Associate (Entry Level) etc. By undergoing this course the candidate will be able to:

- Determine the most effective way to protect computers, networks, software, data and information systems against any possible attacks
- Guide staff to determine specific security issues
- Perform vulnerability testing, risk analyses and security assessments
- Research security standards, security systems and authentication protocols
- Plan, research and design robust security architectures for any IT project
- Test security solutions using industry standard analysis criteria
- Deliver technical reports on test findings
- Define, implement and maintain corporate security policies
- Respond immediately to security-related incidents and provide a thorough post-event analysis
- Update and upgrade security systems as needed

Course Duration: 200 Hours

Minimum Eligibility: *B.Sc (CS/IT) / BCA / PGDCA / NIELIT A' Level
*Candidates who don't possess the requisite minimum qualification should be atleast Graduate with Computer Knowledge and for such candidates passing a qualifying test will be mandatory.

Course Syllabus of CCCS:

1. Information/Cyber Security Concepts and Cryptography (55 hours)
   - Basics of Information Security (08 hours)
   - Security threats, Vulnerabilities (08 hours)
   - Cryptography (02 hours)
   - Digital Signature: Technical Issues and legal Issues (05 hours)
   - Classical Encryption Techniques (04 hours)
   - Symmetric ciphers (10 hours)
   - Asymmetric ciphers (10 hours)
   - Identification and Authentication (04 hours)
   - Security Tools and Technologies (02 hours)
   - E-mail Security (02 hours)

ii. Web Applications Security & Database Security (38 hours)
   - Web Application Technologies (03 hours)
   - Client-side Exploit Frame Work (03 hours)
   - Bypassing Client-side Controls (02 hours)
   - Web Based Malware (02 hours)
   - Securing Authentication (03 hours)
   - Securing Session Management (02 hours)
   - Securing Access Controls (02 hours)
   - Securing Application Architecture (03 hours)
   - Web Server and Web Application Testing with Back Track (03 hours)
   - Securing Web Based Services (05 hours)
   - Database Security (10 hours)
iii. Device Security & Wireless Security (25 hours)
- Switch Security (02 hours)
- Router Security (03 hours)
- DNS Security (02 hours)
- ADSL Security (04 hours)
- Wireless LAN Standard (02 hours)
- Secure Mobile Commerce (02 hours)
- Implementing Basic Wireless Security (02 hours)
- Implementing Advanced Wireless Security (02 hours)
- Home Network Security (02 hours)
- Wireless Embedded System Security (02 hours)
- RFID Security (02 hours)

iv. Security Standards & Information/Cyber Security Policy (25 hours)
- Security Policies and Procedures (05 hours)
- The Audit Process (05 hours)
- The Auditing Techniques (05 hours)
- International Standards (05 hours)
- Regulations (05 hours)

v. Cyber Law & IPR Issues (20 hours)
- Introduction to Information Technology Act 2000 /2008 (03 hours)
- Concept of Cyber Crime and the IT Cyber Crimes (05 hours)
- Protection of Cyber Consumers in India (03 hours)
- Evidence Law vis-a-vis IT Law (04 hours)
- IPR Issues in a nutshell (05 hours)

vi. Seizure & Imaging of Digital Evidence (17 hours)
- Digital Evidence (02 hours)
- Volatile & non volatile digital evidence (05 hours)
- Seizing & Imaging of Non-volatile Data (05 hours)
- Integrity verification (05 hours)

vii. Computer Forensics for Windows & Linux Systems (20 hours)
- Filtering Windows Forensics (05 hours)
- Linux Forensics (05 hours)
- Internet usage analysis (05 hours)
- Tracing the source of the e-mails (05 hours)

Allocation of Hours for Each Module:

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<tr>
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<th>Descriptions</th>
<th>Allocated Hours</th>
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<td>Information/Cyber Security Concepts and Cryptography</td>
<td>55</td>
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<tr>
<td>Module 2</td>
<td>Web Applications Security &amp; Database Security</td>
<td>38</td>
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<tr>
<td>Module 3</td>
<td>Device Security &amp; Wireless Security</td>
<td>25</td>
</tr>
<tr>
<td>Module 4</td>
<td>Security Standards &amp; Information/Cyber Security Policy</td>
<td>25</td>
</tr>
<tr>
<td>Module 5</td>
<td>Cyber Law &amp; IPR Issues</td>
<td>20</td>
</tr>
<tr>
<td>Module 6</td>
<td>Seizure &amp; Imaging of Digital Evidence</td>
<td>17</td>
</tr>
<tr>
<td>Module 7</td>
<td>Computer Forensics for Windows &amp; Linux Systems</td>
<td>20</td>
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<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>200</strong></td>
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</tbody>
</table>
Course Delivery Mechanism

These courses on Cyber Security will be part of Standardized Short Term Courses of NIELIT and registration for these courses will be available online through NIELIT’s student portal. In phase-I, the examination and certification of these courses will be done by individual NIELIT Centre. However, in Phase-II, these courses may be offered through NIELIT's approved institutes and the examination and certification will be online.
NIELIT has also standardized Short Term Courses in Hardware & Software to cater 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 centers/offices. The list of the courses is tabulated below:

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<tr>
<th>Course Group Name</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
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<td>Office Automation and Soft Skills</td>
<td>Certificate Course in Office Automation and Soft Skills</td>
</tr>
<tr>
<td>Office Automation and Soft Skills</td>
<td>Certificate Course in Soft Skills and Communicative English</td>
</tr>
<tr>
<td>Internet and Web Design</td>
<td>Certificate Course in Web Designing</td>
</tr>
<tr>
<td>Internet and Web Design</td>
<td>Certificate Course in Advanced Development using PHP</td>
</tr>
<tr>
<td>Desk Top Publishing</td>
<td>Certificate Course in Desk Top Publishing</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>Certificate Course in Financial Accounting using Tally</td>
</tr>
<tr>
<td>Information Security / Cyber Law</td>
<td>Certificate Course in Information Security &amp; Cyber Law</td>
</tr>
<tr>
<td>Information Security / Cyber Law</td>
<td>Certificate Course in Cyber Forensic</td>
</tr>
<tr>
<td>Information Security / Cyber Law</td>
<td>Diploma in Cyber Law</td>
</tr>
<tr>
<td>Information Security / Cyber Law</td>
<td>PG Diploma in Information System Security</td>
</tr>
<tr>
<td>Dot NET</td>
<td>Certificate Course in Advanced Dot NET</td>
</tr>
<tr>
<td>Dot NET</td>
<td>Certificate Course in ASP Dot NWT with VB Dot Net</td>
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<tr>
<td>Dot NET</td>
<td>Certificate Course in ASP Dot NET with C#</td>
</tr>
<tr>
<td>Dot NET</td>
<td>Diploma in Advanced Dot NET MVC</td>
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<tr>
<td>Dot NET</td>
<td>Advanced Diploma in Dot NET Technologies</td>
</tr>
<tr>
<td>Programming Courses</td>
<td>Certificate Course in programming through C Language</td>
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<tr>
<td>Programming Courses</td>
<td>Certificate Course in programming in C++</td>
</tr>
<tr>
<td>Java</td>
<td>Certificate Course in Core Java</td>
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<tr>
<td>Java</td>
<td>Certificate Course in Advance Java (J2EE)</td>
</tr>
<tr>
<td>Java</td>
<td>Advanced Diploma in J2EE</td>
</tr>
<tr>
<td>Oracle SQL and PL/SQL, Oracle DBA</td>
<td>Certificate Course in Oracle SQL and PL/SQL</td>
</tr>
<tr>
<td>Oracle SQL and PL/SQL, Oracle DBA</td>
<td>Certificate Course in Oracle DBA</td>
</tr>
<tr>
<td>Multimedia and Animation</td>
<td>Certificate Course in Graphic Designing</td>
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<tr>
<td>Multimedia and Animation</td>
<td>Certificate Course in Audio and Video Editing</td>
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<tr>
<td>Multimedia and Animation</td>
<td>Certificate Course in 2D Animation using Flash</td>
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<tr>
<td>Multimedia and Animation</td>
<td>Diploma in introduction Multimedia Developer</td>
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<tr>
<td>Bioinformatics</td>
<td>Certificate Course in Bioinformatics with Project</td>
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<tr>
<td>Bioinformatics</td>
<td>Advanced Diploma in Bioinformatics</td>
</tr>
<tr>
<td>Mobile Application Development using Android / Phonegap</td>
<td>Certificate Course in Mobile Application Development using Android</td>
</tr>
<tr>
<td>Mobile Application Development using Android / Phonegap</td>
<td>Certificate course in Mobile Application Development using Phonegap</td>
</tr>
<tr>
<td>System Administration using Unix / Linux / Windows Server</td>
<td>Certificate Course in System Administration using Unix</td>
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<tr>
<td>Course</td>
<td>Certificate Course</td>
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<tr>
<td>System Administration using Unix / Linux / Windows Server</td>
<td>Certificate Course in System Administration using Linux</td>
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<tr>
<td>System Administration using Unix / Linux / Windows Server</td>
<td>Certificate Course in System Administration using Windows Server</td>
</tr>
<tr>
<td>Cloud Computing</td>
<td>Certificate Course in Cloud Computing</td>
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<tr>
<td>Linux, Apache, MySQL and PHP</td>
<td>Certificate Course in Linux, Apache, MySQL and PHP</td>
</tr>
<tr>
<td>Hardware and Networking</td>
<td>Certificate Course in PC Hardware &amp; Networking</td>
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<tr>
<td>Hardware and Networking</td>
<td>Certificate Course in Network Administration</td>
</tr>
<tr>
<td>Hardware and Networking</td>
<td>Diploma in Computer Application and Network Administration</td>
</tr>
<tr>
<td>Hardware Repair and Maintenance</td>
<td>Certificate Course in Repair &amp; Maintenance of Electronic Products</td>
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<tr>
<td>Hardware Repair and Maintenance</td>
<td>Certificate Course in Repair &amp; Maintenance of Medical Electronics</td>
</tr>
<tr>
<td>Hardware Repair and Maintenance</td>
<td>Certificate Course in PC Assembly and Maintenance</td>
</tr>
<tr>
<td>Hardware Repair and Maintenance</td>
<td>Certificate Course in Mobile Repair and Maintenance</td>
</tr>
<tr>
<td>Hardware Repair and Maintenance</td>
<td>Advanced Diploma in Repair and Maintenance of Medical Equipment</td>
</tr>
<tr>
<td>Embedded System</td>
<td>Certificate Course in Embedded System Design using 8051 Microcontroller</td>
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<tr>
<td>Embedded System</td>
<td>Certificate Course in Embedded System Design using PIC Microcontroller</td>
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<tr>
<td>Embedded System</td>
<td>Certificate Course in Embedded System Design using ARM/ Cortex Microcontroller</td>
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<tr>
<td>Embedded System</td>
<td>Certificate Course in DSP using MATLAB</td>
</tr>
<tr>
<td>Embedded System</td>
<td>Certificate Course in Embedded System Design using 8051 &amp; ARM/ Cortex Microcontroller</td>
</tr>
<tr>
<td>Embedded System</td>
<td>Certificate Course in Integrated Embedded &amp; VLSI System Design</td>
</tr>
<tr>
<td>Embedded System</td>
<td>Certificate Course in Digital Signal and Image Processing</td>
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<tr>
<td>Embedded System</td>
<td>PG Diploma in Embedded System Design</td>
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<tr>
<td>Embedded System</td>
<td>PG Diploma in Embedded Wireless &amp; Mobile Application</td>
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<tr>
<td>VLSI / PCB Design</td>
<td>Certificate Course in VLSI Design</td>
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<tr>
<td>VLSI / PCB Design</td>
<td>Diploma in VLSI Design</td>
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<tr>
<td>VLSI / PCB Design</td>
<td>PG Diploma in VLSI &amp; Embedded Hardware Design</td>
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<td>VLSI / PCB Design</td>
<td>PG Diploma in ASIC Design and Verification</td>
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<tr>
<td>Auto CAD / Industrial Automation</td>
<td>Certificate Course in Auto CAD</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Certificate Course in Finite Element Analysis using ANSYS</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Certificate Course in CAD, Drafting and 3D Modelling</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Certificate Course in CNC Machine Tools and NC Part Programming</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Certificate Course in Master CAM</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Advanced Diploma in CAD/ CAM</td>
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<td>Auto CAD / Industrial Automation</td>
<td>Advanced Diploma in PLC/ SCADA/ DCS Engineer</td>
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<td>Auto CAD / Industrial Automation</td>
<td>PG Diploma in Industrial Automation System Design</td>
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<td>Auto CAD / Industrial Automation</td>
<td>PG Diploma in CAD/CAM</td>
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<tr>
<td>Name of the Course</td>
<td>Vertical Name</td>
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<td>--------------------------------------------------------------------------------</td>
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<tr>
<td>Diploma in Installation &amp; Repair of Consumer Electronics Products</td>
<td>Consumer Electronics</td>
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<tr>
<td>Diploma in Repair &amp; Maintenance of Industrial Instrumentation &amp; Automation System</td>
<td>Industrial Automation</td>
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<tr>
<td>Repair &amp; Maintenance of Power Supply, Inverter &amp; UPS</td>
<td>Industrial Electronics</td>
</tr>
<tr>
<td>Repair &amp; Maintenance of Dental Equipment</td>
<td>Medical Electronics</td>
</tr>
<tr>
<td>Repair &amp; Maintenance of Imaging Equipment (X – Ray &amp; Ultrasound machine)</td>
<td>Medical Electronics</td>
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<tr>
<td>Repair &amp; Maintenance of ECG and ICCU Equipment</td>
<td>Medical Electronics</td>
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<tr>
<td>Post Diploma in Repair &amp; Maintenance of Hospital Equipment</td>
<td>Medical Electronics</td>
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<tr>
<td>Installation &amp; Maintenance of Photocopiers and Printers</td>
<td>Office Automation</td>
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</tbody>
</table>
Appendix

NIELIT Centres

North Zone
✓ 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): SumitComplex, A – 1/9, Vibhutikhand, Gomti Nagar, Lucknow – 226010, Uttar Pradesh
✓ NIELIT CENTRE JAMMU: New Campus University of Jammu, Dr. BR Ambedkar Road, Jammu – 180004, Jammu & Kashmir.
✓ NIELIT CENTRE KURUKSHETRA: Govt. Polytechnic & NID Campus, NH-1 umri Kurukshetra, Haryana
✓ NIELIT CENTRE LEH: S.P. Complex, Skalzangling, Below FCI Godown, Airport road, Leh Ladakh – 194101, Jammu & Kashmir
✓ NIELIT CENTRE PATNA: 11th Floor, Biscoan Tower, Gandhi Maidan, Patna – 800001, Bihar
✓ NIELIT CENTRE ROPAR: Dr. B.R.Ambedkar Bhawan, Giani Zail Singh Nagar, Rupnagar (Punjab)
✓ 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 – 799006, West Tripura, Tripura.
✓ NIELIT CENTRE AIZAWL: Industrial Estate, Zungtui, Aizawl – 796017, Mizoram.
✓ NIELIT AIZAWL (LUNGLEI EXTENSION CENTRE): NIELIT Extension Centre, Lunglei, I IDC Complex, Pukpui, Lunglei – 796691, Mizoram
✓ NIELIT CENTRE GANGTOK: Indira Byepass Road, Sichey, Neare K.B.T. Fuel (Petrol Pump), Gangtok – 737101, Sikkim
✓ NIELIT CENTRE GUWAHATI: Guwahati main center: 1st & 2nd Floor, VittiyaBhavan, 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 – 781022, Assam.
✓ NIELIT GUWAHATI (JORHAT EXTENSION CENTRE): 1st Floor, ISBT, Kotokipukhuri, Tarajian, Jorhat – 785001, 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 CENTRE ITANAGAR: Shiv Mandir Road, E – Sector, Nahrulagun, Itanagar – 791110, Arunachal Pradesh
✓ NIELIT ITANAGAR (PASIGHAT EXTENSION CENTRE): UD Building, Gumin Nagar, Pasighat - 791102, Arunachal Pradesh
✓ NIELIT CENTRE IMPHAL: Akampat, Post Box No. 104, Imphal – 795001, Manipur
✓ NIELIT IMPHAL (CHURACHANDPUR EXTENSION CENTRE): Hill Town, Opposite Laituui Pharmacy, Churachandpur- 795128, Manipur
✓ NIELIT IMPHAL (SENAPATI EXTENSION CENTRE): Angkailongdi, Senapati – 795106, Manipur
✓ NIELIT CENTRE SHILLONG: 2nd Floor, Meghalaya State Housing, Financing co-operative Society, (MSHFC) Limited Building, Behind Bethany Hospital, Nongrim Hills, Shillong – 793003, Meghalaya
✓ NIELIT SHILLONG (TURA EXTENSION CENTRE): Tura Govt. College, New Building Hawakhana, Tura-794001
✓ NIELIT CENTRE TEZPUR: 2nd Floor, ICCW Building, N.T. Road, Near Civil Hospital, Tezpur – 784001, Assam
✓ NIELIT CENTRE KOHIMA: Meriema, New High Court Road, Kohima - 797001, Nagaland. Post Box: 733
✓ NIELIT KOHIMA (CHUCHUYIMLANG EXTENSION CENTRE): Nagaland Gandhi Ashram, NH-61,Chuchuyimlang, Mokokchung District, Nagaland

EAST ZONE:
✓ NIELIT CENTRE KOLKATA: Jadavpur University Campus, Kolkata – 700032, 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
✓ NIELIT CENTRE SRIKAKULAM: NITC Post, Calicut 673601

WEST ZONE:
✓ NIELIT CENTRE AJMER: Village-Khoda, Kota Road, Tehsil-Kekri, District Ajmer – 305404, Rajasthan
✓ NIELIT CENTRE AURANGABAD: CEDTI Complex, University Campus, Aurangabad – 431004, Maharashtra
The Cyber Crime cases registered under the IT Act include:

- Tampering computer source documents (Section 65 IT Act)
- Loss/damage to computer resource/utility (Section 66 (1) IT Act)
- Hacking (Section 66 (2) IT Act)
- Obscene publication/transmission in electronic form (Section 67 IT Act)
- Failure of compliance/orders of Certifying Authority (Section 68 IT Act)
- Failure to assist in decrypting the information intercepted by Govt Agency (Section 69 IT Act)
- Un-authorised access/attempt to access to protected computer system (Section 70 IT Act)
- Obtaining licence or Digital Signature Certificate by misrepresentation / suppression of fact (Section 71 IT Act)
- Breach of confidentiality/privacy (Section 72 IT Act)
- Publishing false Digital Signature Certificate (Section 73 IT Act)
- Fraud Digital Signature Certificate (Section 74 IT Act)

The Cyber Crime cases registered under the IPC include:

- Offences by/against Public Servant (Section 167, 172, 173, 175 IPC)
- False electronic evidence (Section 193 IPC)
- Destruction of electronic evidence (Section 204, 477 IPC)
- Forgery (Section 463, 465, 466, 468, 469, 471, 474, 476, 477A IPC)
- Criminal Breach of Trust (Section 405, 406, 408, 409 IPC)
- Counterfeiting Property Mark (Section 482, 183, 483, 484, 485 IPC)
- Tampering (Section 489 IPC)
- Counterfeiting Currency / Stamps (Section 489A to 489E IPC)


It covers the baseline security practices for stakeholders in the Cyberspace. This International Standard provides: an overview of Cybersecurity, an explanation of the relationship between Cybersecurity and other types of security, a definition of stakeholders and a description of their roles in Cybersecurity, guidance for addressing common Cybersecurity issues, and a framework to enable stakeholders to collaborate on resolving Cybersecurity issues.

Open Web Application Security Project (OWASP)

OWASP Mobile Security Project

M1- Improper Platform Usage M6- Insecure Authorization
M2- Insecure Data Storage M7- Client Code Quality
M3- Insecure Communication M8- Code Tampering
M4- Insecure Authentication M9- Reverse Engineering
M5- Insufficient Cryptography M10- Extraneous Functionality
PAN INDIA PRESENCE

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