



Cyber Crime Investigation Professional

Module 1: Introduction to Cyber Crime

- 1.1 Definition of Cyber Crime
- 1.2 Cyber Crime in Today's world
- 1.3 Cyber Crime in India
- 1.4 Government & Law Enforcement Agencies dealing with cyber crimes

Module 2: Type of Cyber Crime

- 2.1 Nature of cyber Crime
 - 2.1.1 Computer or any Communication device is target (hack vector)
 - 2.1.2 Computer is used as a tool (medium)
- 2.2 Different Kinds of Cyber Crimes
 - 2.2.1 Unauthorized Access and Hacking
 - 2.2.2 Web Hijacking
 - 2.2.3 Email spoofing
 - 2.2.4 Phishing
 - 2.2.5 Cyber Stalking
 - 2.2.6 Denial of service Attack
 - 2.2.7 Virus attacks
 - 2.2.8 Software Piracy
 - 2.2.9 Salami attacks
 - 2.2.10 Cyber Defamation
 - 2.2.11 Sale of illegal articles
 - 2.2.12 Online gambling
 - 2.2.13 Adult Pornography
 - 2.2.14 Child Pornography
 - 2.2.15 Forgery
 - 2.2.16 Theft of information contained in electronic form
 - 2.2.17 Email bombing
 - 2.2.18 Data diddling
 - 2.2.19 Internet time theft
 - 2.2.20 Theft of computer system

- 2.2.21 Physically damaging a computer system
- 2.2.22 Breach of Privacy and Confidentiality
- 2.2.23 E-commerce/ Investment Frauds
- 2.2.24 Cyber Terrorism

Module 3: Basic Components of Cyber Crime

3.1 Basic Concepts

- 3.1.1 Modem, Router, Switch, Wireless router, connectivity components etc.
- 3.1.2 IP address, types of IP,ISP,MSP, WHOIS databases,Proxy,etc.
- 3.1.3 Basic of website hosting, domain names, URL,URI,etc.
- 3.1.4 Major commands, Ports and Protocols, Sockets, MAC address etc.
- 3.1.5 Networking and types of network, Topology, types and monitoring.

3.2 Advanced concepts

- 3.2.1 IPBouncing, IP address conflicts, Port Address problem etc.
- 3.2.2 Cyber-crime through Virtualization, Grid computing, Cloud computing etc.
- 3.2.3 SEO , SMO, and other optimization techniques used by professional hackers
- 3.2.4 Counter intelligence, Social media intelligence etc.

Module 4: Information Gathering

- 4.1 Information Gathering through various search engines
- 4.2 Information Gathering through online websites, databases, reverse look up etc.
- 4.3 Information Gathering through standard software's, online tracing software's etc.
- 4.4 Information Gathering through Social media and other applications

Module 5: Email Frauds and their investigation

- 5.1 Email Clients and their contact details
- 5.2 Email Header analysis of all major Email Clients
- 5.3 Email Header of Forged and spoofed mailed
- 5.4 Special cases of android configured mails
- 5.5 Email tracking scripts and tools
- 5.6 Email investigation case study

Module 6: Social media cases and investigation with case study

- 6.1 Impact of Social Media
- 6.2 Bright face of media
- 6.3 Darker face of media
- 6.4 Social Media Service provider
- 6.5 Information need from SMSP
- 6.6 Identify SMPS and Corresponding nodal officer for the SMSP
- 6.7 Drafting a legal letter

- 6.8 Social media Analytics Challenges
- 6.9 Advance Google Search
- 6.10 Maltego
- 6.11 Web Browser Analysis
- 6.12 Tool (Pasco, IEHistoryView, MozillaHistoryView)
- 6.13 My Last Search

Module 7: Banking Fraud and Online banking frauds investigation with case study

- 7.1 Phishing Attack
- 7.2 Key-logger Attack
- 7.3 Banking Trojan
- 7.4 Malicious Link Attack
- 7.5 ATM Skimming device
- 7.6 Pharming
- 7.7 Debit and Credit Card Cloning
- 7.8 Debit and Credit Card frauds case study
- 7.9 Payment Gateway
- 7.10 Identity Theft on card
- 7.11 Online Shopping fraud case study

Module 8: Website hacking investigation with Case Study

- 8.1 Introduction of Domain Name
- 8.2 Importance of Domain
- 8.3 DNS cache Poisoning
- 8.4 Introduction of FTP log
- 8.5 FTP Log & investigation
- 8.6 C Panel
- 8.7 Control Panel Log Analysis
- 8.8 Audit Trail
- 8.9 Case Study

Module 9: IP Address Tracking, Analysis & Investigation

- 9.1 Introduction to IP Grabber Scripting
- 9.2 How to make a IP Grabber php script
- 9.3 Working with IP Grabber Scripting
- 9.4 Social Networking Account Tracking Case Study
- 9.5 Email Account Tracking Case Study

Module 10: Bogus and Fake Website Cases with Investigation with case study

- 10.1 Analysis using WHOIS
- 10.2 Reverse IP Looking
- 10.3 Link Redirection & Analysis
- 10.4 Website Phishing
- 10.5 Fake Website Case
- 10.6 Tiny URL

Module 11: Internet calls, VOIP calls and their investigation with case study

- 11.1 Introduction to VOIP call & Internet Call
- 11.2 How to make VOIP Call
- 11.3 Types of VOIP Calls
- 11.4 VOIP Call Tracing
- 11.5 Case Study

Module 12: Pornography cases (images, mms etc) and their investigation

- 12.1 Image Morphing
- 12.2 Video Editing
- 12.3 Child Pornography
- 12.4 Adult Pornography
- 12.5 Advance Image & Video Searching
- 12.6 Pornography Image & Video Filtering
- 12.7 Case study

Module 13: Defamation cases, illegal Content Posting, Extortion etc

- 13.1 Various Defamation Cases & Analysis
- 13.2 illegal content Posting Cases & Analysis
- 13.3 How to Remove Defamatory Content
- 13.4 Case study

Module 14: Cyber Laws

- 14.1 Cyber-Crimes under the IT Act
- 14.2 Cyber- Crimes under IPC and Special Laws