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i3indya Ethical Hacking & Cyber Security



One of the **FAVOURITE PLACE** of Engineers/Professionals..!

# i3indya Ethical Hacking & Cyber Security

Course : i3indya Ethical Hacking & Cyber Security (iEHCS)

Certification : Participation Certificate by i3indya™ Technologies

Study Material : Books & CD Free to each participant

#### **FEES & DURATION**

1. For iEHCS (Advance Module 1.1)

**Duration:** 15 Days/45 hrs

Fees: INR 5,700/- (including taxes) per candidate

2. For iEHCS (Advance Module 1.1 + 1.2)

**Duration:** 30 Days/90 hrs

Fees: INR 11,628/- (including taxes) per candidate

3. For iEHCS (Advance Module 1.1 + 1.2 + 2)

**Duration:** 40 Days/120 hrs

Fees: INR 16,188/- (including taxes) per candidate



# **TOPICS TO BE COVERED**

## **ADVANCE MODULE 1.1 – Ethical Hacking & Cyber Security**

(15 Days)

DAY	TOPICS	TIMING
1	<ul> <li>Fundamental of Ethical Hacking</li> <li>Hacking Vs. Ethical Hacking</li> <li>Types of Hackers</li> <li>Skill Profile of a Hacker</li> <li>Some Famous Hackers and Groups</li> <li>Cyber World</li> <li>Advantage and Disadvantage of Cyber world</li> <li>Cyber World as a Home of hackers</li> </ul>	3 Hours
2	Overview of Cyber Law  Introduction To Cyber Law  Cyber Laws Indian  Technical Aspect Of Indian Cyber Law  IT ACT 2000 & 2008  Internet Crimes And Frauds  Cyber Law Cases In India  Organization Under Cyber Laws  Advantages Of Cyber Laws	2 Hours
3	<ul> <li>Information Gathering</li> <li>What Is Information Gathering &amp; Why Hackers Need This?</li> <li>Types Of Information Gathering</li> <li>Information Gathering Using Websites</li> <li>Information Gathering Using Software</li> <li>Information Gathering Using Add-Ons</li> <li>Search Engines- Smart Way Of Information Gathering</li> <li>Scanning And Enumeration</li> <li>Tracing - E-Mail, Mobile Phone, Intruder</li> </ul>	5 Hours
4	Virtualization & System Cloning  Introduction Of Virtualization  Need & Use Of Virtualization  Virtualbox  Installation  Configuration  Maintenance  Installing OS On Virtual Machines  Networking In Virtual Machines  System Cloning  Troubleshooting  Other Tools For Virtualization	3 Hours

DAY	TOPICS	TIMING
5	<ul> <li>Windows Hacking &amp; Security (Win 8 &amp; Win 7)</li> <li>Windows OS &amp; Security</li> <li>Hacking Into System By Changing Passwords</li> <li>Getting Access To System By Elevating Privileges</li> <li>Finding Out The Passwords Of Windows</li> <li>Bypassing The Windows Security</li> <li>Hack from Guest to Admin</li> <li>Password in Plain Text Directly</li> <li>Hacking By USB Devices</li> <li>Mitigation Of System Attacks</li> <li>Setting Up A Secure System</li> </ul>	5 Hours
6	<ul> <li>Password Cracking Techniques</li> <li>What is Password Cracking</li> <li>Types of Password Cracking Techniques</li> <li>How Different Password Crackers Work</li> <li>Windows Password Cracking</li> <li>FTP / Network Password Cracking</li> <li>Zip/ RAR Password Cracking</li> <li>Doc &amp; PDF Password Cracking</li> <li>Using GPU For Password Cracking</li> <li>Password Security</li> </ul>	3 Hours
7	<ul> <li>Data Hiding Techniques</li> <li>What Is Steganography</li> <li>How Attacker Hides His Data In Images And Other Formats</li> <li>How To Find Data Which Are Hidden</li> <li>What Is Cryptography</li> <li>Advanced Cryptography Tools</li> <li>How Are Programs And Data Wrapped</li> <li>Secure Measures To Protect Our Data</li> </ul>	3 Hours
8	Hacking By Batch Programming & Scripting  Basics Of Scripting  Languages Used In Scripting  Writing Your First Program  Malacious Program Scripting  Process Killer  Firewall Killer  Antivirus Killer  System killer  Session Hijacking Using Batch Scripting  Data Theft Using Batch Script  Automation Using Scripting  Designing Tools Using Scripting  Developing Security Tools Using Scripting.	3 Hours

DAY	TOPICS	TIMING
9	<ul> <li>Hacking by Viruses, Trojans, Keyloggers &amp; Spywares</li> <li>What is Trojan?</li> <li>Trojans Attack Big Famous Cases</li> <li>Types Of Trojans</li> <li>Different way a Trojan Can Get Into A System</li> <li>How We Create A Trojan and Control System</li> <li>How Attacker Bypass Your Antivirus By Trojans</li> <li>Analysis Of Trojans/Virus</li> <li>How we remove Trojans Manually</li> <li>Security Against Trojans</li> </ul>	4 Hours
10	<ul> <li>Malware Analysis &amp; Fake Antivirus Detections</li> <li>Introduction of Malware</li> <li>Types of Malware</li> <li>Common Malwares In Cyber</li> <li>Types of Malware Analysis <ul> <li>Behavior Analysis</li> <li>Code Analysis</li> </ul> </li> <li>Manual Malware Analysis</li> <li>Tools for Malware Analysis</li> <li>Countermeasures</li> </ul>	3 Hours
11	<ul> <li>IDS, IPS and Honeypots</li> <li>Overview of IDS, IPS &amp; Honeypot</li> <li>Use of IDS &amp; IPS</li> <li>Installation of IDS &amp; IPS</li> <li>Prevention &amp; Detection</li> <li>Honeypot &amp; its Types</li> <li>Implementation - Honeypots</li> <li>Honeypot Tools</li> </ul>	3 Hours
12	Proxy Server & Virtual Private Network (VPN) Technology  Proxy And Types Of Proxies Why Hackers Use Proxy? How To Hide IP Address While Chatting How To Open Block Website In College/Companies Convert Your Machine As Proxy Server With HTTPS Proxy Advantage And Disadvantage Of Proxy Analyzing Proxy Bug How Proxy Hack Your Passwords Etc What Is Better Than Proxy What Is VPN? Why We Use VPN Advantage & Disadvantage Of VPN Free VPN Countermeasures	3 Hours

DAY	TOPICS	TIMING
13	<ul> <li>Google Database Hacking</li> <li>Introduction And Working Of Search Engines</li> <li>List Of Common Search Engines On Web</li> <li>Comparing And Choosing Best Search Engine</li> <li>Dorks For Hacking Search Engines</li> <li>Tools For Search Engines Hacking</li> <li>Web Ripping</li> <li>Finding Admin Pages And Weakness In Site</li> <li>Security Against Search Engine Hacking</li> </ul>	3 Hours

## **ADVANCE MODULE 1.2 – Ethical Hacking & Cyber Security**

(15 Days)

DAY	TOPICS	TIMING
14	<ul> <li>Email Hacking &amp; Security Issues</li> <li>World Famous Big Email Hacking Cases</li> <li>IIT Bombay Alumni, Anil Ambani, Rahul, Gandhi, Facebook CEO Mark Zuckerberg (Case Study)</li> <li>Analysis Email Attacks (Live Demo) Manually &amp; Automatic</li> <li>Cookies Stealing (Session Hijacking) of All Big Mail Servers</li> <li>Phishing Attacks (Normal &amp; Advanced)</li> <li>Tab Nabbing Attack</li> <li>Social Engineering Attack</li> <li>Analyzing the Vulnerabilities of Email Servers</li> <li>Analyzing Fake &amp; Real Profiles &amp; Email Accounts</li> <li>Fake Mailing Attack</li> <li>Email &amp; Fake Profile Tracing</li> <li>Hacker Email Backdoor Installing Technique For Future Access</li> <li>Email Password Stealing By Plugins, Extensions Etc.</li> <li>Email Hacking By Keylogger, Spywares &amp; Malicious Softwares</li> <li>Countermeasures</li> </ul>	6 Hours
15	Facebook Hacking, Security & Forensic  • World Famous Big Facebook Hacking Cases • Cookies Stealing of Facebook Accounts • Facebook Phishing Attacks • Normal Phishing Attack • Advanced Phishing Attack • Normal & Advanced Security  • Facebook Tab Nabbing Attack • Normal & Advanced Tab Nabbing Attack • Identify & Disable Tab Nabbing Attack • Security Against Tab Nabbing Attack	6 Hours

DAY	TOPICS	TIMING
	<ul> <li>Facebook Social Engineering Attack</li> <li>Facebook Forget Password Attack</li> <li>Facebook Guessing Attack</li> <li>Facebook Password Cracking With the Help of Social Engineering</li> </ul>	
	<ul> <li>Analyzing Fake &amp; Real Profile of Facebook</li> <li>Delete Spam Messages on Facebook</li> <li>Facebook Fake Messaging Attack</li> <li>Facebook Tracing Method Techniques (Basic &amp; Advanced)</li> <li>Facebook Backdoor Installing Technique For Future Access</li> <li>Facebook Password Stealing By Plugins, Extensions Etc.</li> <li>How to find if your Facebook Account has been hacked or not</li> <li>Facebook Account security with Email &amp; SMS Notifications</li> <li>How to Hack Password using Facebook Hacker</li> <li>Hack Facebook account password with key logger</li> <li>Facebook Security &amp; Forensics</li> </ul>	
16	Clickjacking & Tabnabbing Attacks  • What Is Clickjacking  • How Does A Clickjacking Work  • Facebook Likejacking  • How Hacker Use Clickjacking  • Execution Of Malicious Code Into Machine  • Possibilities Of Clickjacking  • Clickjacking Killer - The IFRAME Buster  • How Protect From Being Clickjacked	3 Hours
17	Advanced Methodology for Privacy on Internet	3 Hours
	<ul> <li>Antivirus Privacy</li> <li>Automatic analyzing of Malicious Links</li> <li>Internet Privacy Tools</li> </ul>	

DAY	TOPICS	TIMING
18	Social Engineering  Introduction to Social Engineering  Types of Social Engineering  Tools Based  Manually  World's Biggest Social Engineering Cases  Web based Social Engineering  Vulnerability in Social Engineering  Analyzing a Social Engineering Attack  Security against Social Engineering	3 Hours
19	Android Hacking, Security & Forensics  Introduction to Android Android OS Structure Overview of Android Apps Android Rooting Application Cracking of Android Cracking PIN of Android Devices Pattern Unlock Cracking Android Security Android Forensics Countermeasures	5 Hours
20	Credit Card Frauds & Cases  Introduction of Plastic Money Some Big Credit Card Cases Solved by i3indya Team Type of Credit Card Hacker's Credit card Theft Techniques Online & Offline Credit Card Generators Vulnerability In Credit Card & Payment Gateway Big Credit Card Fraud Website on Internet Detection of Credit Card Fraud Security Against Credit Card Fraud Countermeasures	3 Hours
21	<ul> <li>Website &amp; Database Hacking Attacks</li> <li>Introduction of Websites &amp; Database</li> <li>Authentication Process Of Web Application</li> <li>Attack on Website &amp; Web Application</li> <li>SQL Injection Attacks</li> <li>PHP Injection Attacks</li> <li>Java Script Injection</li> <li>Scripting Attacks</li> <li>RFI &amp; LFI Attacks</li> <li>Countermeasures</li> </ul>	6 Hours

DAY	TOPICS	TIMING
22	Web Server Hacking & Security  Introduction of Webserver Types of Webserver  Locally Remotely Hosting C-Panel & Other Panels Database Configuration  Webserver Exploits Private Exploits Shell (Control Panel) Designing & Uploading Web Server Routing Backdoor Installation on Server Server Passwords Hacking Web Server Security Against Attacks	3 Hours
23	Vulnerability Assessment & Penetration Testing Tools & Methodologies  • What is VA & PT • Difference between VA & PT • Need of VA & PT • Penetration Testing Methodology • Types of Penetration Testing • Scope of Pen-testing • Why Penetration Testing • Manual VA-PT • Tool Based VA-PT • Reporting a VA-PT • Reporting a VA-PT • Available VA-PT Platforms • Closed Source Platform • Open Source Platforms • Benefits of Open Source Over Closed Source • Backtrack - VA-PT • Bugtraq - VA-PT	5 Hours
24	<ul> <li>Wireless Hacking &amp; Countermeasures</li> <li>Wireless Standards</li> <li>Common Vulnerabilities in Wireless Devices</li> <li>Encryption Standards Used in Wi-Fi</li> <li>WEP Cracking</li> <li>WPA/WPA2 Cracking</li> <li>WPS Cracking</li> <li>Countermeasures</li> </ul>	4 Hours
	Exam – Theory & Practical	

## **ADVANCE MODULE 2 - Ethical Hacking & Cyber Security**

(10 Days)

DAY	TOPICS	TIMING
25	Linux Hacking & Security  Introduction To Linux OS  Installation, Configuration & Maintenance  Resetting Your Linux Password  Grub Password Hacking  FTP & SSH Password Cracking  Security Against Files  Security Against Linux Systems  IP Table Configuration ( Advanced )  OS Hardening  Troubleshooting	6 Hours
26	<ul> <li>Macintosh Hacking &amp; Forensic</li> <li>Introduction of Mac</li> <li>Architecture of Mac</li> <li>Mac Password Cracking without any tool</li> <li>Mac Password cracking with tool</li> <li>Installing Backdoor in Mac</li> <li>Data Recovery in Mac</li> <li>Securing Mac System</li> </ul>	5 Hours
27	<ul> <li>Switch &amp; Router Devices Hacking</li> <li>Introduction to Switch &amp; Router</li> <li>Vulnerabilities in Switch &amp; Router</li> <li>Exploiting Switch &amp; Router Vulnerability</li> <li>Switch &amp; Router Password Cracking With &amp; Without Tool</li> <li>Backdoor Installation</li> <li>Securing Switch &amp; Router</li> </ul>	3 Hours
28	<ul> <li>Network Security &amp; Hacking</li> <li>Introduction To Networks (LAN/WAN)</li> <li>Understanding Communication Protocols</li> <li>Sniffing Attacks</li> <li>DOS &amp; DDOS Attack</li> <li>Mis-configuration</li> <li>Firewall Configuration &amp; Maintenance</li> <li>Network Monitoring &amp; Analysis</li> <li>Logs Maintenance</li> </ul>	3 Hours
29	Cyber Forensics Investigations & Evidence Recovery  Introduction to Forensics  Incidence Response and Computer Forensic  Windows Live Response  Linux Live Response  Web Browser Forensics  Network Forensic  Disk Imaging  Data Recovery Using Tools  Forensic Analysis & Chain of Custody Form	6 Hours

DAY	TOPICS	TIMING
30	Audio, Video & Image Forensics  Introduction to File formats Analyzing Files Detecting Modified Files Extract Hidden Data from Files Audio & Video Enhancement Integrity Checking	2 Hours
31	Cyber Crime Investigation  Introduction of Cyber Crime  Need of Cyber Crime Investigation in Cyber World  Types of Cyber Crime  Online Crime investigation  Offline Crime Investigation  Solving Different Cyber Cases  Email Hacking Case  System Hacking Cases  Credit Card Cases  Privacy & Data Theft Cases  Fake Profile Cases  Software Piracy Cases  Pornography Cases  Identity Theft Cases Etc.	4 Hours
32	Case Study ( Live Demo By i3indya Team )	3 Hours
	EXAM – Theory & Practical	

## Why Ethical Hacking & Cyber Security?

- 1. Very useful for candidates seeking career in Information Security / Cyber Security.
- 2. Important for Corporate / Working Professionals to secure their cyber space.
- 3. It helps you to defend against attacks from Hackers & Crackers.
- 4. To catch a thief you have to think like a thief.

## Why Ethical Hacking & Cyber Security @ i3indya Technologies?

- 1. Latest and Updated Topics are covered.
- 2. New Topics like Hacking & Securing Linux, Android, Mac, Web Servers are taught.
- 3. We concentrate not only on Hacking but also on Security of all Topics.
- 4. Forensics on almost all platforms and devices are taught.
- 5. Hands on training with live demonstrations.
- 6. Well experienced Trainers.
- 7. Tied up with several government organizations for Training and Consultancy.
- 8. Trained more than 30000 professionals from all over India.
- 9. Providing training to CBI, NIA and State Police across India.
- 10. We limit our tool usage from third-party and we provide manual approach for each Technique.
- 11. We also design our own tools.

### **Pre-Requisites**

- 1. Basics of Computer
- 2. Knowledge of how to use internet
- 3. Basics of Networking

## Recommendation

It is strongly recommended to bring your own LAPTOP during the training so that you can easily practice the exercises at home.