



3GIRPS
INSTITUTE OF RESEARCH & POLICY STUDIES
BUILD INDIA TO SERVE THE WORLD

**3G INSTITUTE OF RESEARCH AND POLICY STUDIES
PRESENTS**

**90+ HOURS
CYBER SECURITY**

Venue: IIT Madras Research Park
admin@3girps.org | www.3girps.org | + 91 99624 30308

Introduction to ethical hacking

- Information security,
- Hack value,
- Vulnerability,
- Exploit,
- Payload,
- Zero-day attack,
- Daisy-chaining,
- Doxing,
- Bot,
- Hacking
- concept Types and Phases,
- Ethical Hacking concepts, and scope,
- Information security controls.

Footprinting concepts

- Footprinting through search engines,
- Footprinting through social networking sites,
- Website footprinting,
- Email footprinting,
- Who is footprinting,
- Network footprinting,
- Footprinting Pen Testing.

Overview of network scanning

- Scanning Methodology,
- check for the live system,
- check for open ports,
- scanning beyond IDS,
- Scan for vulnerability,
- Banner Grabbing,
- draw network diagrams,
- Scanning pen-testing.

Enumeration concepts

- NetBIOS Enumeration, SNMP Enumeration, LDAP Enumeration, NTP Enumeration, SMTP and DNS Enumeration, Enumeration pentesting.

System Hacking

- Cracking Passwords, Escalating Privileges, Executing Applications, hiding files, Covering Tracks.

Introduction to Malware

- Trojan Concepts, Virus and Worm, Malware Reverse Engineering, Malware Detection, Malware countermeasures

Virtual Machine

- Installation of VM's in Windows and MAC
- Configuration of VM's and Installing OS

Kali Linux

- Kali Linux Installation
- Working with Kali Linux (GUI)
- Working with Kali Linux (CLI)
- Set Up Kali Linux from ISO File

Sniffing Concepts

- MAC Attacks, DHCP Attacks, Spoofing Attack, ARP poisoning, DNS Poisoning, Countermeasures.
- Social Engineering Concepts, Social Engineering Techniques, Impersonation on Social Networking Sites, Identify Threat, Social engineering Countermeasures.
- DoS/DDoS Concepts, DoS/DDoS Attack Techniques, Botnets, DoS/DDoS Attack Tools, Countermeasures, DDoS case study.

Session hijacking Concepts

- Network Level Session Hijacking, Application Level Session Hijacking, Countermeasures, Penetration Testing.
- Hacking Web servers, Compromise of user accounts, Website defacement, Secondary attacks from the website, Root access to other applications or servers, Data tampering and data theft.

Metasploit Framework for Penetration Testing

- Working with Metasploit
- Windows Hacking
- Creation of Malicious Executable
- Payload crafting like .exe .apk etc
- MSF Venom
- Veil to Create Custom Payloads
- TheFatRat - Installation and Creating a Custom Malware
- Embedding Malware in PDF Files
- Embedding Malware in Word Documents
- Embedding Malware in Firefox Add-ons
- Empire Project in Action
- Exploiting Java Vulnerabilities

Hacking Web Applications: -

- Web App concepts, Web App Threats, Hacking Methodology, Web Application Hacking Tools, Security Tools, Web App Pen Testing.
- SQL Injection, SQL Injection concepts, SQL Injection Methodology, Types of SQL Injection, Evasion Techniques, Countermeasures.
- Hacking Wireless Networks, Wireless Concepts, Wireless Hacking Methodology Wireless Encryption, Wireless Hacking Tools, Wireless Threats, Bluetooth Hacking, Wi-Fi Pen Testing.
- Hacking Mobile Platforms, Mobile Platform Attack Vendors, Hacking Android IOS Hacking IOS, Hacking windows phone OS, Mobile device Management, Mobile pen-testing.
- Evading IDS, Firewalls, and Honeypots, IDS, Firewall and Honeypot concepts, IDS, Firewall and Honeypot solutions, Evading IDS, Evading Firewalls.
- IDS/Firewall Evading Tools, Detecting Honeypots, IDS/Firewall Evasion countermeasures, Penetration testing.
- Cloud Computing, Introduction to Cloud Computing, Cloud computing Threats Cloud Computing Attacks, Cloud Security, Cloud Security Tools, Cloud Penetration Testing.
- Cryptography, Cryptography concepts, Encryption Algorithms, Cryptography Tools, Public Key Infrastructure (PKI), Email Encryption, Disk Encryption, Cryptography Attacks, Cryptanalysis Tools

*****EXAM*****

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GET IN TOUCH WITH US



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HeadQuarters : IIT Madras Research Park, A Block, 6th floor, Kanagam
Road, 32, Tharamani, Chennai, Tamil Nadu 600113

Course Offered

- Internship
- Google AI
- Python
- Ethical Hacking
- Machine Learning - Deep Learning Workshop

DISCLAIMER : IITMRP does not have anything to do with the event and only the venue has been hired for the said event.