



DIGITAL INDIA - AWARENESS SESSION

This Seminar will educate the student into an interactive environment where they will be shown about how to scan, test, hack and secure their systems. Students will understand how our defense measure works and then to scan their networks & attack their own. On completion of the session students will be able to identify the different threats posed by hackers and other malicious attackers and how to protect our network & devices from those attacks.

Audience : College students/staffs who use internet on a day to day basis for e-mails, social media, net banking, downloading documents, softwares etc and other general internet users.

Duration : 2 hours

Prerequisite : Basic knowledge of Computers, Internet & Networks

Key Benefits : Knowledge about Ethical Hacking & Countermeasures.

Table of contents:

- Key issues plaguing the information security world, incident management process, and penetration testing.
- Various types of foot printing, foot printing tools, competitive intelligence gathering and countermeasures.
- Network scanning techniques and scanning countermeasures.
- Enumeration techniques and enumeration countermeasures.
- System hacking methodology, steganography, steganalysis attacks, and covering tracks.
- Windows OS Security. Hacking Into System By Changing Passwords & Getting Access To System By Elevating Privileges and to bypass The Windows Security.
- Operating System Attacks, Misconfiguration Attacks, Application-Level Attacks, Examples of Application-Level Attacks, Shrink Wrap Code Attacks.
- Different types of Trojans, Trojan analysis, and Trojan countermeasures.
- Working of viruses, virus analysis, computer worms, malware analysis procedure, and countermeasures.
- Virus creation in computer using Batch file programming, HTML & VB Script.
- Packet sniffing techniques and how to defend against sniffing.
- Social Engineering techniques, identify theft, and social engineering countermeasures.
- DoS/DDoS attack techniques, botnets, DDoS attack tools, and DoS/DDoS countermeasures.
- Find security issues, verify vulnerability mitigations & manage security assessments with Metasploit.
- The cross-site scripting (XSS) vulnerability to exploit client side web application vulnerability.
- Web server Attacks - Directory Traversal Attacks, HTTP Response Splitting Attack, Web Cache Poisoning Attack ,HTTP Response Hijacking, SSH Brute force Attack, Web server Password Cracking, Web Application Attacks.



- Session hijacking techniques and countermeasures.
- Different types of web server attacks, attack methodology, and countermeasures.
- Different types of web application attacks, web application hacking methodology, and countermeasures.
- SQL injection attacks and injection detection tools.
- Performing MAC, DHCP & Spoofing attacks. Poisoning using ARP and DNS.
- Wireless Encryption, wireless hacking methodology, wireless hacking tools, and wi-fi security tools.
- Mobile platform attack vector, android vulnerabilities, jailbreaking iOS, windows phone 8 vulnerabilities, mobile security guidelines, and tools.
- Firewall, IDS and honeypot evasion techniques, evasion tools, and countermeasures.
- Various cloud computing concepts, threats, attacks, and security techniques and tools.
- Different types of cryptography ciphers, Public Key Infrastructure (PKI), cryptography attacks, and cryptanalysis tools.
- Hacking Web Applications - Web Attack Vectors, Command Injection Attacks, File Injection Attack, Hidden Field Manipulation Attack, Stealing Users' Cookies, Cookie/Session Poisoning, Broken Authentication and Session Management.
- Monitoring Keyloggers -Spytech SpyAgent, All In One Keylogger, Keyloggers for Windows, Amac Keylogger for Mac, Hardware Keyloggers.
- Spyware usage - Desktop Spyware, Activity Monitor, Email and Internet Spyware, Power Spy, Internet and Email Spyware, Child Monitoring Spyware, Net Nanny Home Suite, Screen Capturing Spyware, USB Spyware, Audio Spyware, Video Spyware, Print Spyware.
- Various types of penetration testing, security audit, vulnerability assessment, and penetration testing roadmap.