

Cyber Security Workshops

Objective:

This workshop is specifically designed to provide the right knowledge to the aspiring Hacking and Cyber Security enthusiasts. This workshop will explore the various means that an intruder has, to gain access to computer resources. It will investigate weaknesses by discussing the theoretical background behind, and whenever possible, actually performing the attack.

Session 1: Introduction

- What is Hacking?
- Who is a Hacker? Types of Hackers
- What is Cybercrime?
- What is Ethical Hacking?
- What are Physical Threats?
- What are Non-physical threats?

Session 2: Fundamental of Ethical Hacking

- Skills Required to Become a Ethical Hacker
- Commonly Used Hacking Tools
- What is Social Engineering? Attacks, Techniques & Prevention
- Cryptography ,Cryptanalysis, RC4, CrypTool
- Data Hiding Techniques & Investigation

Session 3: Basics of Internet, Networking & Hacking

- What is a Network?
- Types of network – LANs, WANs & WLANs
- Introduction to Internet?
- History of the Internet
- What is a Server?

- What is IP and MAC Addresses
- What is a domain name?
- What is a browser?
- Client-Server Relationship Model
- What is a port?

Session 4: Desktop/PC Security, Antivirus & IDS (Practical)

- What is a Trojan?
- What is a worm?
- What is a virus?
- Trojans, viruses, and worms Countermeasures

Session 5: Network & Passwords Sniffer

- What is network sniffing?
- Active and passive sniffing
- Hacking Activity: Sniff Network
- What is Media Access Control (MAC) Flooding

Session 6: Hack WiFi (Wireless) Network

- What is a wireless network?
- How to access a wireless network?
- Wireless Network Authentication WEP & WPA
- How to Crack Wireless Networks
- How to Secure wireless networks

Session 7: Hack a Web Server

- Web server vulnerabilities
- Types of Web Servers
- Types of Attacks against Web Servers
- Effects of successful attacks
- Web server attack tools

- How to avoid attacks on Web server

Session 8: SQL Injection

- How SQL Injection Works
- Hacking Activity: SQL Inject a Web Application
- Other SQL Injection attack types
- Automation Tools for SQL Injection
- How to Prevent against SQL Injection Attacks

Session 9: Hacking and Securities

- Email Hacking & Security Issues
- Facebook Hacking & Security
- Website & Database Hacking Attacks
- Android Hacking & Security
- Credit Card Frauds & Cases

Session 10: Certification Distribution