

AMSW26 ETHICAL HACKING

UNIT-1 ETHICAL HACKING

- 1.1 Data Theft in Organizations, Elements of Information Security, Authenticity and Non-Repudiation, Security Challenges, Effects of Hacking, Hacker- Types of Hacker,
- 1.2 Ethical Hacker, and Hacktivism. Role of Security and Penetration Tester, Penetration Testing Methodology, Networking & Computer Attacks- Malicious Software (Malware),
- 1.3 Protection Against Malware, Intruder Attacks on Networks and Computers, Addressing Physical Security- Key Loggers and Back Doors

UNIT-2 HACKING AT FOOT PRINTING AND SOCIAL ENGINEERING LEVELS

- 2.1 Web Tools for Foot Printing, Conducting Competitive Intelligence, Google Hacking, Scanning, Enumeration, Trojans & Backdoors, Virus & Worms, Proxy & Packet Filtering,
- 2.2 Denial of Service, Sniffer, and Social Engineering shoulder surfing, Dumpster Diving, Piggybacking.

UNIT-3 PHYSICAL & DATA SECURITY

- 3.1 Physical Security- Attacks and Protection, Steganography – Methods, Attacks and Measures, Cryptography
- 3.2 Methods and Types of Attacks, Wireless Hacking, Windows Hacking, Linux Hacking

UNIT-4 NETWORK & WEB SERVER HACKING

- 4.1 Routers, Firewall & Honeypots, IDS & IPS, Web Filtering, Vulnerability, Penetration Testing, Session Hijacking, Web Server, SQL Injection, Buffer Overflow,
- 4.2 Reverse Engineering, Email Hacking, Incident Handling & Response, Bluetooth Hacking, Mobile sPhone Hacking

UNIT-5 ETHICAL HACKING ATTACKS, PROTECTION AND TESTS

- 5.1 An introduction to the particular legal, professional and ethical issues likely to face the domain of ethical hacking, ethical responsibilities,
- 5.2 Professional integrity and making appropriate use of the tools and techniques associated with ethical hacking – Social Engineering, Host Reconnaissance, Session Hijacking,
- 5.3 Hacking Web Server, Database, Password Cracking, Network and Wireless, Trojan, Backdoor, UNIX, LINUX, Microsoft, Buffer Overflow, Denial of Service Attack.

Reference Books:

1. Steven DeFino, Barry Kaufman, Nick Valenteen, Official Certified Ethical Hacker Review Guide, CENGAGE Learning, 2009-11-01.
2. Ankit Fadia, “Network Intrusion Alert: An Ethical Hacking Guide to Intrusion Detection”, Thomson, 2008.
3. Whitaker & Newman, “Penetration Testing and Network Defense”, Cisco Press, Indianapolis, IN, 2006.