



30-Hours Value Added Course on Advanced Ethical Hacking

(CAV-26-01)

(Instructor-led Offline/Online Classes)

Session 2026-27

**For
BCA / MCA Students**

Organized By

**Department of Computer Application
Integral University, Lucknow**

Content

Introduction to Ethical Hacking

- Hacking Methodology
- Process of Malicious Hacking
- Foot printing and Scanning
- Enumeration
- System Hacking and Trojans
- Black Box Vs White Box Techniques

Hacking Methodology

- Denial of Service, Sniffers
- Session Hijacking and Hacking Web Servers
- Web Application Vulnerabilities and Web Techniques Based Password Cracking

Web and Network Hacking

- SQL Injection
- Hacking Wireless Networking
- Viruses, Worms and Physical Security
- Linux Hacking: Linux Hacking.
- Evading IDS and Firewalls

Report writing & Mitigation

- Introduction to Report Writing & Mitigation
- Requirements for low level reporting & high level reporting of Penetration testing results
- Demonstration of vulnerabilities and Mitigation of issues identified including tracking.

Experiments

- Passive Reconnaissance using “Who is” and DNS harvesting Online tools
- Active Reconnaissance using tools and web kit foot printing.
- Full Scan, Half Open Scan and Stealth scan using “nmap”
- UDP and Ping Scanning using “Advance Lan Scanner” and “Superscan”
- Packet crafting using “Packet creator” tools
- Exploiting NetBIOS vulnerability
- Password Revelation from browsers and social networking application