



Subject Code: 10CE0104

Subject Name: Ethical hacking

M.Tech. Year - I

Objective: To investigate the importance of ethical hacking and its implementation in organizations.

Credits Earned: 2 Credits

Course Outcomes: After completion of this course, student will be able to

- Finding the importance of ethical hacking tools
- Understanding the ethical hacking process
- Implementing ethical hacking tools in an organization

Pre-requisite of course: NA.

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE (E)	Mid Sem (M)	Internal (I)	Viva (V)	Term work (TW)	
0	0	4	2			25	25	25	75

Ethical hacking LAB

1. Key issues plaguing the information security world, incident management process, and penetration testing
2. Various types of footprinting, footprinting tools, and countermeasures
3. Network scanning techniques and scanning countermeasures
4. Working of viruses, virus analysis, computer worms, malware analysis procedure, and countermeasures
5. Packet sniffing techniques and how to defend against sniffing
6. Social Engineering techniques, identify theft, and social engineering countermeasures



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7. DoS/DDoS attack techniques, botnets, DDoS attack tools, and DoS/DDoS countermeasures
8. Session hijacking techniques and countermeasures
9. Different types of webserver attacks, attack methodology, and countermeasures
10. Different types of web application attacks, web application hacking methodology, and countermeasures
11. SQL injection attacks and injection detection tools

Supplementary Resources:

1. Ethical Hacking (2009), "Advantages and disadvantages", available at URL <http://www.cea.ac.in/stdcenter/seminars/2006admission/CS/ETHICAL%20HACKING.pdf>, [accessed on 1st February 11, 2010].
2. Greg Meyer and Steven Casco (2002) Hack proofing ColdFusion, Syngress Publishers, pp.515.
3. Greg Meyer and Steven Casco (2002) Hack proofing ColdFusion, Syngress Publications, pp. 515.
4. Harold F. Tipton and Micki Krause (2004) Information security management handbook, 5th edition, CRC Press Publications, pp. 2036.