

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Computer Engineering (IT Systems and Network Security)

Semester: II

Subject Name: **Ethical Hacking & Cyber Laws (Elective III & IV- Group 2)**
Subject Code: **725106**

Course Content:

The Business Aspects of Penetration Testing, The Technical Foundations of Hacking, Foot printing and scanning Enumeration and Step-by-Step System Hacking, Automated Security Assessment Tools, Trojans and Backdoors, Sniffers, session Hijacking and Denial of Service, Web Server Hacking, Web application Vulnerabilities and Database Attacks, Wireless Technologies, Security and Attacks, IDS, Honeypots and Firewalls, Cryptographic Attacks and Defenses, Social Engineering and Physical Security, Understanding Copy Right in Information Technology, Understanding the technology of Software software-copyright vs Patent debate Authorship , Assignment issues Commissioned work, Work for hire Idea/Expression dichotomy, Copy right in internet, Legal Issues in internet and Software Copyright Jurisdiction Issues, Copyright Infringe Remedies of Infringement Multimedia, Copyright issues Software Piracy, Patents understanding, Cyber Crimes, Understanding Cyber Crimes in context of Internet, Indian Penal Law & Cyber Crimes Fraud Hacking Mischief, International law, Obscenity and Pornography Internet, Potential of Obscenity Indian Law On Obscenity & Pornography Technical, Legal solutions International efforts Changes in Indian Laws, E-Commerce & Taxation, Security and Evidence in E-Commerce Dual Key encryption Digital signatures security issues, UNCITRAL model law of E- Commerce , Indian Legal Position on E-Commerce IT Act 2000/Indian Evidence Act/Draft law on E-Commerce.

Text Book:

1. **Gray Hat Hacking:**

The Ethical Hackers Handbook by Allen Harper, Shon Harris, Cyber Laws by C.K punia, Sumit Enterprises

Reference Book:

1. Cyber Crime and Law Enforcement by V. D. Dudeja, Commonwealth Publishers