

Name of faculty: Gaurav Gambhir

Discipline: Computer Science

Semester: 7th

Subject: CSE 417 N – Cyber Security

Lesson Plan Duration: 15 Weeks (from July, 2018 to December, 2018)

** Work Load (Lecture / Practical) per week (in hours): Lectures -03

Week	Theory	
	Lecture day	Topic (including assignment/test)
1 st	1 st	Introduction to Module
	2 nd	Overview of Cyber Crime, Nature and Scope of Cyber Crime
	3 rd	Types of Cyber Crime: crime against individual, Crime against property, Cyber extortion, Drug trafficking, cyber terrorism.
2 nd	4 th	Types of Cyber Crime: crime against individual, Crime against property, Cyber extortion, Drug trafficking, cyber terrorism.
	5 th	Need for Information security
	6 th	Threats to Information Systems
3 rd	7 th	Information Assurance
	8 th	Cyber Security and Security Risk Analysis.
	9 th	Revision of Unit 1
4 th	10 th	Cyber Crime Issues: Unauthorized Access to Computers, Computer Intrusions
	11 th	Viruses and Malicious Code, Internet Hacking and Cracking,
	12 th	Virus and worms
5 th	13 th	Software Piracy
	14 th	Intellectual Property, Mail Bombs,
	15 th	Exploitation, Stalking and Obscenity in Internet
6 th	16 th	Password Cracking
	17 th	Steganography, Key loggers and Spyware

	18 th	Trojan and backdoors
7 th	19 th	phishing, DOS and DDOS attack,
	20 th	SQL injection, Buffer Overflow.
	21 st	Introduction to cyber attacks: passive attacks, active attacks
8 th	22 nd	Cyber crime
	23 rd	prevention methods
	24 th	Application security (Database, E-mail and Internet),
9 th	25 th	Data Security Considerations-Backups
	26 th	Archival Storage and Disposal of Data
	27 th	Security Technology-Firewall and VPNs
10 th	28 th	Intrusion Detection,
	29 th	Access Control
	30 th	Hardware protection mechanisms
11 th	31 st	OS Security
	32 nd	Digital Forensics: Introduction to Digital Forensics
	33 rd	historical background of digital forensics
12 th	34 th	Forensic Software and Hardware,
	35 th	need for computer forensics science,
	36 th	special tools and techniques
13 th	37 th	digital forensic life cycle, challenges in digital forensic.
	38 th	Law Perspective: Introduction to the Legal Perspectives of Cybercrimes and Cyber security
	39 th	Cybercrime and the Legal Landscape around the World,
14 th	40 th	Why Do We Need Cyber laws
	41 st	The Indian IT Act

	42nd	Cybercrime Scenario in India,
15th	43rd	Digital Signatures and the Indian IT Act,
	44th	Cybercrime and Punishment.
	45th	Revision