

COEP Technological University, Pune

Teaching Plan- Theory (July 2025 - Devember 2025)

Name of the Faculty: Dr. Deepak Kshirsagar

Course: Cyber Security

Course Code: CT (DE)-22017

Exam Scheme: TA, MSE and ESE

Class: Final Year B Tech (CSE)

Teaching Scheme: L: 3 Hrs/Week

Sr No	Date	Day	Lecture No.	Timing	Unit No.	Topic to be covered	Ref. Book / PPT/ Link	*Teaching methodology / Instructional Strategy
1.	23-7-25	WED	1	9:30-10:30	1	Discussion on Syllabus of CS, Nature and scope of computer crime	Link and PPT	Lecture
2.	24-5-25	THU	2	9:30-10:30	1	Understanding how cyber criminals and hackers work, Different types of cyber-crimes	PPT	Lecture
3.	25-7-25	FRI	3	10:30-11:30	1	Introduction to digital signatures, Cryptography	PPT	Lecture
4.	30-7-25	WED	4	11:30-12:30	1	Digital certificate and public key infrastructure	PPT	Lecture
5.	31-7-25	THU	5	10:30-11:30	1	IT Act	PPT	Lecture
6.	1-8-25	FRI	6	10:30-11:30	1	Impact of cyber-crime on e-governance and E-commerce.	PPT and Link	Group Discussion
7.	6-8-25	WED	7	11:30-12:30	2	Overview of malware reverse engineering	PPT	Lecture
8.	7-8-25	THU	8	10:30-11:30	2	Types of malware, Malicious code families	PPT	Lecture
9.	8-8-25	FRI	9	10:30-11:30	2	Latest trends in malware analysis	PPT	Lecture
10.	13-8-25	WED	10	11:30-12:30	2	Basic static and dynamic analysis	PPT and tool	Demonstration of tools
11.	14-8-25	THU	11	10:30-11:30	2	Malware analysis techniques, Case study	PPT	Video-showcase
12.	20-8-25	WED	12	11:30-12:30	3	Introduction to web application security: Attacks	PPT	Lecture

13.	21-8-25	THU	13	10:30-11:30	3	web application security: vulnerabilities and mitigation	PPT	Lecture
14.	22-8-25	FRI	14	10:30-11:30	3	Client-side security, Server-side security	PPT	Lecture
15.	28-8-25	THU	15	10:30-11:30	3	Application security: HTTPS and HSTS	PPT	Lecture
16.	29-8-25	FRI	16	10:30-11:30	3	Security engineering: Passwords and their limitations	PPT	Lecture
17.	3-9-25	WED	17	11:30-12:30	3	Attacks on passwords	PPT	Lecture
18.	4-9-25	THU	18	10:30-11:30	3	CAPTCHA and OTP	PPT	Lecture
19.	17-9-25	WED	19	11:30-12:30	4	Secure email systems: PGP	PPT	Lecture
20.	18-9-25	THU	20	10:30-11:30	4	SMIME and , DKIM	PPT	Lecture
21.	19-9-25	FRI	21	10:30-11:30	4	DMARC and DNSSec	PPT	Lecture
22.	24-9-25	WED	22	11:30-12:30	4	SMTP STS e	PPT	Lecture
23.	25-9-25	THU	23	10:30-11:30	4	Privacy and security for online social networks	PPT	Lecture
24.	26-9-25	FRI	24	10:30-11:30	4	Database security	PPT	Lecture
25.	1-10-25	WED	25	11:30-12:30	4	Browser security	PPT	Lecture
26.	3-10-25	FRI	26	10:30-11:30	4	Mobile device security.	PPT	Lecture
27.	8-10-25	WED	27	11:30-12:30	5	Security Technologies: IDS, IPS	PPT and Tools	Lecture and Demonstration of tools
28.	9-10-25	THU	28	10:30-11:30	5	Ethical hacking	PPT and Tools	Lecture and Demonstration of tools
29.	10-10-25	FRI	29	10:30-11:30	5	Penetration testing fundamentals: Reconnaissance	PPT and Link	Lecture and Demonstration of tools
30.	15-10-25	WED	30	11:30-12:30	5	Penetration testing fundamentals: scanning	PPT and Link	Lecture and Demonstration of tools

31.	16-10-25	THU	31	10:30-11:30	5	Penetration testing fundamentals gaining and maintaining access,	PPT and Tools	Lecture abd Demonstration of tools
32.	17-10-25	FRI	32	10:30-11:30	5	Penetration testing fundamentals : Covering tracks	PPT and Tools	Lecture and Demonstration of tools
33.	23-10-25	THU	33	10:30-11:30	6	Cloud security	PPT	Lecture and Video-showcase
34.	24-10-25	FRI	34	10:30-11:30	6	Cloud security	PPT	Group Discussion
35.	29-10-25	WED	35	11:30-12:30	6	Operating system security	PPT and link	Video-showcase
36.	30-10-25	THU	36	10:30-11:30	6	Security of social networking websites	PPT	Lecture
37.	31-10-25	FRI	37	10:30-11:30	6	Security of social networking websites	PPT	Group Discussion
38.	6-11-25	THU	38	10:30-11:30	6	IoT devices security	PPT	Lecture
39.	7-11-25	FRI	39	10:30-11:30	6	E-commerce websites security	PPT	Lecture

***Teaching methodology / Instructional Strategy:** Lecture, Group Discussion, Video-showcase, and Demonstration of tools

Displayed to students on (Provide Date): 31-7-2025

Provide Remarks regarding content, Innovation in Pedagogy etc: Study of Latest Cyber Crime cases and Use of tools

Faculty Member

Head of the Department