

GOPAL KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

GOURAHARI VIHAR, PO: RANIPUT, JEYPORE – 764 005

LESSON PLAN

Name of the Subject: CSPE3012 INFORMATION SECURITY AND MANAGEMENT

Session : 2025-26

Name of the Faculty: Amod Kumar Bagh

Semester: 6th

Branch: Computer Sc. & Engg.

No. of Weeks: 10 Weeks

WEEK	DAY	THEORY TOPICS	CLASSES
Module-I: Introduction to Information Security			
1	1	Overview, CIA Triad	1
	2	Security threats and attacks	1
	3	Malware, Phishing, DoS	1
	4	Security services	1
2	5	Firewalls, IDS	1
	6	VPNs	1
	7	Security models	1
	8	Network fundamentals	1
Module-II: Cryptography			
3	9	Classical cryptography	1
	10	DES, AES	1
	11	RSA	1
	12	PKI, Digital signatures	1
4	13	SSL/TLS	1
	14	IPsec	1
	15	Kerberos	1

	16	OAuth, SAML	1
Module-III: Program Security			
5	17	Secure programs, errors	1
	18	Malware	1
	19	Controls	1
	20	OS protection	1
6	21	Trusted OS	1
	22	Security policies	1
	23	Models	1
	24	Assurance	1
Module-IV: Database Security			
7	25	Security requirements	1
	26	Integrity, sensitive data	1
	27	Inference problem	1
	28	Multilevel security	1
8	29	Network threats	1
	30	Firewalls, IDS	1
	31	Secure email	1
	32	Review	1
Module-V: Administering Security			
9	33	Security planning	1
	34	Risk analysis	1
	35	Policies	1
	36	Physical security	1
10	37	Legal issues	1
	38	Computer crime	1

	39	Ethical issues	1
	40	Case studies	1