

Academic Lesson Plan of Summer 2026

Department : CSE	Semester : 6th	Name of the teaching faculty: SWARNALATA SAHOO
Subject: Cryptography & Network Security	No. of days/per week class allotted . 4p/week.	Semester from : 22/12/2025
		No. of weeks:15 weeks
		Topics to be covered:
1st week	1st	1.1 The need for security
	2nd	Continue
	3rd	1.2 Security approach
	4th	Continue
2nd week	1st	1.3 Principles of security
	2nd	Continue
	3rd	1.4 Types of attacks
	4th	Continue
3rd week	1st	2. Cryptography concepts 2.1 Plain text & Cipher Text
	2nd	2.2 Substitution techniques
	3rd	Continue
	4th	2.3 Transposition techniques
4th week	1st	2.4 Encryption & Decryption
	2nd	Continue
	3rd	2.5 Symmetric & Asymmetric key cryptography
	4th	Continue
5th week	1st	3.1 Symmetric key algorithm types
	2nd	Continue
	3rd	3.2 Overview of Symmetric key cryptography
	4th	Continue
6th week	1st	3.3 Data encryption standards
	2nd	Continue
	3rd	3.5 The RSA algorithm
	4th	Continue
7th week	1st	3.6 Symmetric & Asymmetric key cryptography
	2nd	Continue
	3rd	3.7 Digital signature
	4th	Continue
8th week	1st	4.1 Digital certificates
	2nd	Continue
	3rd	Continue
	4th	4.2 Private key management
9th week	1st	4.3 PKIX Model
	2nd	Continue
	3rd	4.4 Public key cryptography standards
	4th	Continue
10th week	1st	5.1 Basic concept
	2nd	5.2 Secure socket layer
	3rd	Continue
	4th	5.3 Transport layer security

11th week	1st	5.4 Secure Hyper text transfer protocol(SHTTP)
	2nd	5.5 Time stamping protocol (TSP)
	3rd	5.6 Secure electronic transaction (SET)
	4th	Continue
12th week	1st	6.1 Authentication basics
	2nd	Continue
	3rd	6.2 Password
	4th	Continue
13th week	1st	6.3 Authentication Tokens
	2nd	6.4 Certificate based authentication
	3rd	Continue
	4th	6.5 Biometric authentication
14th week	1st	Revision
	2nd	7.1 Brief introduction of TCP/IP
	3rd	Continue
	4th	7.2 Firewall
15th week	1st	Continue
	2nd	7.3 IP Security
	3rd	7.4 Virtual Private Network (VPN)
	4th	Revision & Semester Question Answer Discussion

S. Sahoo
20/12/25
Signature of Faculty

H. S.
18/12/25
HOD
Sr. Lecture, CSE