

Lesson Plan		
Discipline		Computer Engineering
Semester		6th
Subject		Software Engineering (6.3)
Lesson Plan Duration		From 15 Jan. 2026 to 30 April 2026
Work Load (L/P)		Lectures- 03, Practical- 00
Week	Lecture Day	Topic (including assignment/test)
1st	1	Introduction to Software Engineering: Concept of systems
	2	Types of systems: open, closed, static and dynamic systems
	3	Introduction: Programmes v/s Software Products
2nd	4	Emergence of Software Engineering: Early Computer Programming
	5	High-level Language Programming & Control flow based Design
	6	Data Structure Oriented Design & Object Oriented Design
3rd	7	Unit I Review: Software Engineering Evolution
	8	Software Life Cycle Models: Requirement of Life Cycle Model
	9	Classic Waterfall Model: Phases and Limitations
4th	10	Iterative Model & Prototyping Model
	11	Evolutionary Model & Spiral Model
	12	Introduction to Agile Model: Principles and Benefits
5th	13	Comparison of different Life Cycle Models
	14	1st Sessional Exam
	15	Software Planning: Responsibilities of Software Project Manager
6th	16	Metrics for Project Size Estimation: LOC (Lines of Code)
	17	Function Point Metric: Components and Calculation
	18	Project estimation Techniques: Introduction to COCOMO Model
7th	19	COCOMO Model: Basic, Intermediate, and Detailed
	20	Software Requirement Specifications (SRS)
	21	Characteristics of a good SRS document
8th	22	Assignment: Prepare SRS for a sample project
	23	2nd Sessional Exam
	24	Software Design: Characteristics and features of good Software Design
9th	25	Design Concepts: Cohesion and Coupling (Types and Importance)

	26	Software design Approaches: Function Oriented Design
	27	Data Flow Diagrams (DFD): Symbols and Levels
10th	28	Data Dictionary, Decision Trees, and Decision Tables
	29	Object Oriented Design Concepts
	30	Structured Coding Techniques and Coding Styles
11th	31	Software Documentation: Internal and External
	32	Unit IV Review: Design and Implementation
	33	Software Testing: Basic Concept and Importance
12th	34	Verification v/s Validation (V&V Model)
	35	Levels of Testing: Unit Testing
	36	Black Box Testing Techniques (Boundary Value Analysis, Equivalence Partitioning)
13th	37	White Box Testing Techniques (Path Testing, Control Flow)
	38	Integration Testing and System Testing
	39	Introduction to Configuration Management
14th	40	Revision: Unit I & II
	41	Revision: Unit III & IV
	42	Revision: Unit V
15th	43	3rd Sessional Exam
	44	Previous Year Paper Discussion
	45	Final Revision and Doubt Session