

Siruseri IT park, OMR, Chennai - 603103

LESSON PLAN							
Department of Information Technology							
Name of the	SOFTWARE ENGINEERING			Name of the	Mrs. Viswajaa		
Subject Code	CS8494			Year / Sem	III/V		
Acad Year	2021-2022			Batch	2019-2023		
Course Objective							
1.To understand the phases in a software project							
2.To understand fundamental concepts of requirements engineering and Analysis Modeling.							
3. Understand the major considerations for enterprise integration and deployment.							
4.Learn various testing and maintenance measures							
Course Outcome							
Update completion of the course,the students will be able to;							
CO1. Identify the key activities in Software Project Management and compare software process models.							
CO2.Compare different process models.							
CO3. Concepts of requirements engineering and Analysis Modeling.							
CO4 .Apply systematic procedure for software design and deployment.							
CO5. Compare and contrast the various testing and maintenance							
Lesson Plan							
Sl. No.	Topic(s)	T / R* Book	Periods Required	Mode of Teaching	Blooms Level	CO	PO
UNIT-I							
1	Introduction to Software Engineering	T1	1	BB	L1	CO1	PO1,PO3
2	Software Process	T1	1	BB	L1	CO1	PO1,PO3
3	Perspective Process Models ,Waterfall Model, Incremental ProcessModels	T1	1	BB	L2	CO2	PO1
4	Evolutionary Process Models	T1	1	BB	L2	CO2	PO1
5	Specialized Process Models	T1	1	BB	L2	CO2	PO1
6	Introduction to Agility	T1	1	PPT	L1	CO1	PO2
7	Agile process	T1	1	PPT	L1	CO1	PO1
8	Extreme programming	T1	1	PPT	L1	CO1	PO1
9	XP Process	T1	1	PPT	L3	CO1	PO2
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method							
UNIT II REQUIREMENTS ANALYSIS AND SPECIFICATION							
10	Software Requirements: Functionaland Non-Functional Requirements	T1	1	BB	L1	CO2	PO2
11	User requirements, System requirements	T1	1	BB	L1	CO2	PO2
12	Software Requirements Document	T1	1	BB	L1	CO2	PO1
13	Requirement Engineering Process	T1	1	BB	L2	CO2	PO2
14	Requirements elicitation and analysis	T1	1	BB	L2	CO2	PO2
15	requirements validation, requirements	W2	1	PPT	L2	CO2	PO2
16	Classical analysis: Structured system	W2	1	PPT	L2	CO2	PO2
17	Petri Nets	T1	1	PPT	L3	CO2	PO2
18	Data Dictionary	T1	1	PPT	L3	CO2	PO1
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method							
UNIT III SOFTWARE DESIGN							
19	Design process And Design Concepts	T1	1	BB	L1	CO4	PO1,PO3
20	Design Model And Design Heuristic	T1	1	BB	L1	CO4	PO1,PO3
21	Architectural Design	T1	1	BB	L1	CO4	PO1,PO3
22	Architectural styles	T1	1	BB	L2	CO3	PO1
23	Architectural Mapping using Data	T1	1	BB	L2	CO3	PO3
24	User Interface Design And Interface	T1	1	PPT	L1	CO3	PO2
25	Interface Design –Component level	W1	1	PPT	L2	CO3	PO2
26	Designing Class based components	W2	1	PPT	L3	CO3	PO2
27	Traditional Components	W1	1	BB	L3	CO3	PO2
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method							
UNIT IV TESTING AND MAINTENANCE							
28	Software testing fundamentals	T1	1	BB	L1	CO4	PO1
29	Internal and external views of Testing	T1	1	BB	L1	CO4	PO2
30	white box testing - basis path testing	T1	1	BB	L2	CO4	PO2
31	black box testing- Regression Testing	T1	1	BB	L2	CO4	PO1
32	Integration Testing – Validation	T1	1	BB	L2	CO4	PO1
33	System Testing And Debugging	T1	1	BB	L2	CO4	PO2
34	Software Implementation Techniques:	T1	1	PPT	L3	CO4	PO9
35	Maintenance and Reengineering-BPR	W2	1	PPT	L1	CO4	PO1
36	Reengineering process model Reverse	W2	1	PPT	L2	CO4	PO10
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							
Evaluation method							
UNIT V PROJECT MANAGEMENT							
37	Software Project Management:Estimation	T1	1	BB	L1	CO5	PO1
38	LOC, FP Based Estimation,	T1	1	BB	L2	CO5	PO1
39	COCOMO I & II Model	T1	1	BB	L2	CO5	PO5
40	Project Scheduling – Scheduling	T1	1	BB	L2	CO5	PO2
41	Earned Value Analysis Planning	T1	1	PPT	L2	CO5	PO2
42	RFP Risk Management –Identification, Projection	T1	1	PPT	L3	CO5	PO10
43	Risk Management-Risk Identification	W2	1	BB	L3	CO5	PO2
44	RMMM Plan	W2	1	BB	L3	CO5	PO8
45	CASE TOOLS	W2	1	BB	L2	CO5	PO12
Suggested Activity: Assignment / Case Studies / Tuorials/ Quiz / Mini Projects / Model Developed/others Planned if any							

Evaluation method														
Content Beyond the Syllabus Planned														
1														
2														
Text Books														
1	T1. Roger S. Pressman, “Software Engineering – A Practitioner’s Approach”, Seventh Edition, Mc													
2	T2. Ian Sommerville,”Software Engineering”, 9th Edition, Pearson Education Asia, 2011.													
3														
Reference Books														
1	R1. Rajib Mall, Fundamentals of Software Engineering”, Third Edition, PHI Learning Private													
2	R2. Pankaj Jalote, —Software Engineering, A Precise ApproachI, Wiley India, 2010													
3	R3.Kelkar S.A., —Software EngineeringI, Prentice Hall of India Pvt Ltd, 2007													
Website / URL References														
1	W1: http://nptel.ac.in/													
2	W2: https://www2.cs.siu.edu/~mengxia/Courses%20PPT/435/Chapter_03.pdf													
3	W3: http://www.cs.tau.ac.il/~nachumd/models/Nets.pdf													
Blooms Level														
Level 1 (L1) : Remembering Level 2 (L2) : Understanding Level 3 (L3) : Applying		Lower Order Thinking			Fixed Hour Exams	Level 4 (L4) : Analysing Level 5 (L5) : Evaluating Level 6 (L6) : Creating					Projects / Mini Projects			
Mapping syllabus with Bloom’s Taxonomy LOT and HOT														
Unit No	Unit Name				L1	L2	L3	L4	L5	L6	LOT	HOT	Total	
Unit 1	SOFTWARE PROCESS AND AGILE DEVELOPMENT				4	5					9	0	9	
Unit 2	REQUIREMENTS ANALYSIS AND SPECIFICATION					5	1	3			6	3	9	
Unit 3	UNIT III SOFTWARE DESIGN					5	1	3			6	3	9	
Unit 4	UNIT IV TESTING AND MAINTENANCE					2	7				9	0	9	
Unit 5	UNIT V PROJECT MANAGEMENT						7		1	1	7	2	9	
Total					4	17	16	6	1	1	37	8	45	
Total Percentage					8.88888889	38	35.5556	13.3333	2.22222	2.22222	82.2222	17.7778	100	
CO PO Mapping														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2		2	2		1	1	1		1	3	2
CO2	3	3	2		2	2		1	1	1		1	3	2
CO3	3	3	2		2	2		1	1	1		1	3	2
CO4	3	3	2		2	2		1	1	1		1	3	2
CO5	3	3	2		2	2		1	1	1		1	3	2
Avg	3	3	3			3		1		1		1	3	2
Justification for CO-PO mapping														
CO1	Identify the key activities in Software Project Management and compare software process models.													
CO2	Compare different process models.													
CO3	Concepts of requirements engineering and Analysis Modeling.													
CO4	Apply systematic procedure for software design and deployment.													
CO5	Compare and contrast the various testing and maintenance													
3	High level				2									
Name & Sign of Faculty Incharge :														
Name & Sign of Subject Expert :														
Head of the Department :														