INSTITUTE OF ENGINEERING AND MANAGEMENT
GOURAHARI VIHAR, PO: RANIPUT, JEYPORE – 764 005
LESSON PLAN

Discipline:**CSE**	Semester: **First**	Faculty NAME: **RAMESWARI PATTNAIK** **Lecturer(CSE)**
Subject: **Software engineering**	No. of days classallotted/week:**04**	Semesterfromdate: JULY TO DECEMBER No.of weeks: **15**
Week	**ClassDay**	**Theory**
1ST	1st	**Module-1** Program vs. Software product and Emergence of Software Engineering.
	2nd	Computer Systems Engineering
	3rd	Software Life Cycle Models
	4th	Classical Water fall model and Iterative Water fall model
2ND	1st	Prototyping model and Evolutionary model
	2nd	Spiral mode
	3rd	**Module-2** Responsibility of Project Manager.
	4th	Project Planning
3RD	1st	Metrics for Project size estimation(LOC and FP)
	2nd	Project Estimation Techniques
	3rd	COCOMO Models, Basic, Intermediate and complete
	4th	Scheduling
4TH	1st	Organization and Team structure,
	2nd	Staffing
	3rd	Risk Management
	4th	Configuration Management
5TH	1st	**Module-3** Requirements gathering and analysis
	2nd	Software Requirements Specification
	3rd	Contents of SRS
	4th	Characteristics of Good SRS
6TH	1st	Organization of SRS
	2nd	Techniques for representing complexing logic
	3rd	**Module-4** What is a Good S/W design,Cohesion and coupling
	4th	Neat arrangement and S/W Design approaches
7TH	1st	Structured analysis
	2nd	Data FlowDiagrams and Symbols used in DFD
	3rd	Designing DFD and Developing DFD model of a system
	4th	Shortcomings of DFD
8TH	1st	Structured design
	2nd	12Principles of transformation of DFD to Structure Chart
	3rd	Transform analysis and Transaction Analysis
	4th	Design Review
9TH	1st	**Module-5** Introduction to Good Interface
	2nd	Characteristics of Good Interface
	3rd	UID
	4th	Basic concepts of UID
10TH	1st	User interfaces
	2nd	Types of user interface
	3rd	Components based GUI development

	4th	Components based GUI development
11TH	1st	**Module-6**Introduction toCoding,Code review and Code walk through .
	2nd	Code inspections and software Documentation
	3rd	Testing
	4th	Introduction to Unit testing and Black Box Testing
12TH	1st	Equivalence class partitioning and boundary value analysis and White Box Testing
	2nd	Different White Box methodologies statement coverage branch coverage
	3rd	, condition coverage, path coverage,cyclomatic complexity data flow based testing and mutation testing
	4th	Debugging approaches and Debugging guidelines.
13TH	1st	Integration Testing
	2nd	Phased and incremental integration testing
	3rd	System testing alphas beta and acceptance testing
	4th	Performance Testing, Error seeding 6.15General issues associated with testing
14TH	1st	**Module-7**Introduction to Software Reliability
	2nd	Different reliability metrics
	3rd	Reliability growth modeling
	4th	What is Software quality
15TH	1st	Software quality
	2nd	Introduction to SQMS
	3rd	Software Quality Management System
	4th	Revision and previous year question discuss

Books Recommended:

1. Computer Fundamentals and Programming in C by ReemaThareja, Oxford Unversity Press
2. Programming in ANSI C by A.N Kamthane, Pearson Education
3. Computer Application by Kalyani Publisher
4. Let us C by Y. Kanetkar, BPB
5. Computer Fundamentals, by E. Balaguruswamy, TMH