Bhoj Reddy Engineering College for Women: Hyderabad
Department of Information Technology
Lesson plan of faculty member for the academic year 2016–17

Class: III B Tech   Branch-Section: IT-B   Semester: I
Subject: Software Engineering   Lectures per week: 4+1 (Tutorial)

Lecture Number	Topics to be covered	Date (s)
UNIT – I: Introduction to Software Engineering	
1	Evolving role of software, Changing Nature of Software	13June2016
2	Legacy Software, Software Myths	15 June2016
3	Software Engineering-A layered technology	17 June2016
4	Process frame work	18 June2016
5	Tutorial-Introduction to Software Engineering(G3,G1,G2)	14,15,17 June2016
6	CMMI	20 June2016
7	Process Patterns, Process assessment	22 June2016
8	Process Patterns, Process assessment	24 June2016
9	Personal and team process models	25 June2016
10	Tutorial- CMMI(G3,G1,G2)	21,22,24 June2016
11	Process Models- Waterfall model	27 June2016
12	Incremental process models	29 June2016
13	Evolutionary process models	1 July2016
14	Specialized process models	2 July 2016
15	Prototype Model	4 July 2016
16	Tutorial-Process Models(G3,G1,G2)	28,29 June2016,1 July 2016
17	The Unified process	8 July 2016
UNIT-II: Software Requirements	
18	Software Requirements: Functional & non-Functional requirements	9 July 2016
19	System requirements, User requirements	11 July 2016
20	Interface Specification	13 July 2016
21	Tutorial- Software Requirements(G3,G1,G2)	5,8, July 2016
22	Software requirements document	15 July 2016
23	Requirements engineering process- Feasibility studies	16 July 2016
24	Requirements elicitation & analysis	18 July 2016
25	Requirements validation	20 July 2016
26	Tutorial-Software requirements document(G3,G1,G2)	12,13,15 July 2016
27	Requirements Management	22 July 2016
28	System models-Context models	23 July 2016
29	Behavioral models, Data models	25 July 2016
30	Object models, Structured methods	27 July 2016
31	Tutorial -System models(G3,G1,G2)	19, 20, 22 July 2016
UNIT-III: Design Engineering	
32	Design process and Design quality	29 July 2016
33	Design Concepts	30 July 2016
34	Tutorial-Design Concepts(G3,G1)	26,29 July 2016
35	Design model, Pattern based software design	3 August2016
36	Creating an architectural design: Software architecture	5 August2016
37	Data design, Architectural style and patterns	17 August2016
38	Architectural Design, Assessing alternative architectural designs	19 August2016
39	Mapping data flow into software architecture	20 August2016

40	Tutorial -Modelling component -level design(G3,G1,--)	2,5 August2016
41	Designing class-based components	22 August2016
42	Conducting component -level design	24 August2016
43	OCL, Designing conventional components	26 August2016
44	Performing user interface design: Golden rules	27 August2016
45	Tutorial - User interface design(G3,G1,G2)	16,17,19 August2016
46	User interface analysis and design	29 August2016
47	Interface analysis	31 August 2016
48	Interface design steps	2 September 2016
UNIT-IV: **Testing Strategies**		
49	Strategic Approach for testing	7 September 2016
50	Tutorial -Design evaluation(G3,G1,G2)	23,24,26 August2016
51	Black Box testing ,White–Box testing	9 September 2016
52	Validation Testing ,System Testing,	10 September 2016
53	Art of Debugging	14 September 2016
54	Product Metrics: Software quality , Framework for Metrics	16 September 2016
55	Tutorial- Testing Strategies (G3,G1)	30,31 August2016
56	Metrics for analysis model	17 September 2016
57	Metrics for design model	19 September 2016
58	Metrics for testing, Metrics for Maintenance	21 September 2016
59	Metrics for Process and Products	23 September 2016
60	Tutorial-Metrics for source code (G3,G1,G2)	6,7,9 September 2016
61	Software Measurement, Metrics for Software quality	24 September 2016
UNIT-V: **Risk Management & Quality Management**		
62	Reactive vs Proactive Risk strategies, Software risks	26 September 2016
63	Risk Identification, Risk Projection	28 September 2016
64	Risk Refinement, RMMM, RMMM Plan	29 September 2016
65	Tutorial-Quality Management (G3,G1,G2)	20,21,23 September 2016
66	Quality concepts, Software quality assurance	28 October 2016
67	Software Reviews	29 October 2016
68	Formal Technical reviews,	31 October 2016
69	Software reliability, Statistical software quality assurance	2 November 2016
70	Tutorial-ISO Quality standards (G3,G2)	1,2 November 2016
71	Revision	4 November 2016

Text books:
1. Software Engineering, A practitioner's Approach, Roger S Pressman, sixth edition. McGrawHill International Edition.
2. Software Engineering, Ian Sommerville, seventh edition, Pearson education.

Name and signature of the faculty: D. Navaneetha

Name and signature of Head of the Department: G. SrinivasaRao