Practical Plan

T.E. (CE- Section A) (Semester V)

Subject: SOFTWARE ENGINEERING*(Practical)*

Teacher-in-charge: Dr. B. S. Daga

Subject code: CSL501

Academic Term: July – October 2022

Course Outcomes:

Upon completion of this course students will be able to:

CSL501.1 Identify requirements and apply software process model to selected case study
CSL501.2 Develop architectural models for the selected case study
CSL501.3 Use computer-aided software engineering (CASE) tools

Relationship of course outcomes with program outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CSL501.1		1												
CSL501.2				1										
CSL501.3				1	1									

Justification of PO to CO mapping

CO	Competency	Performance Index
CSL501.1	2.1 Demonstrate an ability to identify and formulate complex engineering problem	2.1.2 Identify processes/modules of a computer-based system and parameters to solve a problem

	2.2 Demonstrate an ability to formulate a solution plan and methodology for an engineering problem	2.2.3 Identify existing solution/methods to solve the problem, including forming justified approximations and assumptions. 2.2.5 Compare and contrast alternative solution processes to select the best process.
	2.4 Demonstrate an ability to execute a solution process and analyze results	2.4.2 Analyze and interpret the results using contemporary tools. 2.4.3 Identify the limitations of the solution and sources/causes.
	4.2 Demonstrate an ability to design experiments to solve open-ended problems	4.2.1 Design and develop appropriate procedures/methodologies based on the study objectives
CSL501.3	4.1 Demonstrate an ability to conduct investigations of technical issues consistent with their level of knowledge and understanding	4.1.1 Define a problem for purposes of investigation, its scope and importance 4.1.2 Able to choose appropriate procedure/algorithm, dataset and test cases. 4.1.3 Able to choose appropriate hardware/software tools to conduct the experiment.
	4.2 Demonstrate an ability to design experiments to solve open-ended problems	4.2.1 Design and develop appropriate procedures/methodologies based on the study objectives

	4.3 Demonstrate an ability to analyze data and reach a valid conclusion	4.3.1 Use appropriate procedures, tools and techniques to and analyze collect data 4.3.2 Critically analyze data for trends and correlations, stating possible errors and limitations 4.3.3 Represent data (in tabular and/or graphical forms) so as to facilitate analysis and explanation of the data, and drawing of conclusions 4.3.4 Synthesize information and knowledge about the problem from the raw data to reach appropriate conclusions
	5.1 Demonstrate an ability to identify/create modern engineering tools, techniques and resources	5.1.1 Identify modern engineering tools, techniques and resources for engineering activities 5.1.2 Create/adapt/modify/extend tools and techniques to solve engineering problems

CO Assessment Tools:

Course Outcomes	***Direct Method (80%)***				***Indirect Method (20%)***
	Attendance	Lab Performance	Journal Assessment	End Sem Exam (PR)	Course exit survey
CSL501.1	10%	20%	20%	50%	100%
CSL501.2	10%	20%	20%	50%	100%
CSL501.3	10%	20%	20%	50%	100%

CO calculation= (0.8 *Direct method + 0.2*Indirect method)

Rubrics for assessing Course Outcome with each assessment tool:

Laboratory:

Sr. No	**Performance Indicator**	**Exceed Expectation (EE)**	**Meet Expectation (ME)**	**Below Expectation (BE)**
1	On time Completion & Submission (01)	01 (On Time)	NA	00 (Not on Time)
2	Logic/Algorithm Complexity analysis(03)	03(Correct)	02(Partial)	01 (Tried)
3	Coding Standards (03): Comments/indention/Naming conventions Output/Test Cases	03(All used)	02 (Partial)	01 (rarely followed)
4	Post Lab Assignment (03)	03(done well)	2 (Partially Correct)	1(submitted)

Practical Session Plan

CLASS	**BEComputer Engineering, Semester VII**
Academic Term	**July – October 2022**
Subject	**Software Engineering (CSL501)**

Evaluation System		***Hours***	***Marks***
	Practical Examination	--	--
	Oral Examination	--	25
	Term work	--	25
	Total	--	50

Time Table	***Day***	***Batch***	***Time***
	Monday	***A***	***1.30-3.30 PM***
	Tuesday	***B***	***11.00am-1.00 pm***
	Friday	***C***	***11.00am-1.00 pm***
	Thursday	***D***	***11.00am-1.00 pm***

Title of Experiments

Sr.	***Title***	***Attained COs***
1	Software Requirement Specification	CSL501.3
2	Implement Course Scheduling System using SCRUM method on JIRA Tool	CSL501.2
3	Implement Course Scheduling System using KANBAN method on JIRA Tool	CSL501.1
4	To calculate function point for Course Scheduling System	CSL501.1
5	To estimate project cost using COCOMO Model for Course Scheduling	CSL501.2
6	Develop diagrams for data flow analysis on Course Scheduling System	CSL501.2
7	Implementation of data flow design pattern	CSL501.3
8	Do design using Object Oriented approach and hence highlight Cohesion and Coupling in the design	CSL501.2
9A	To design test cases for performing black box testing for Course Scheduling	CSL501.3
9B	To design test cases for performing white box testing for Course Scheduling	
10	Version controlling & Risk Analysis of the project Bidirectional	CSL501.2

Newly added experiments	
1	Implement Course Scheduling System using SCRUM method on JIRA Tool
2	Implement Course Scheduling System using KANBAN method on JIRA
3	Implementation of data flow design pattern
4	Version controlling & Risk Analysis of the project Bidirectional

Practical Session Plan

Batch	***Dates***		***Remarks***
	Planned	***Actual***	
Experiment No. 1 – Software Requirement Specification			
A	01/08/2022		

B	02/08/2022		
C	05/08/2022		
D	04/08/2022		
Experiment No. 2 Implement Course Scheduling System using SCRUM method on JIRA Tool			
A	08/08/2022		
B	09/08/2022		
C	12/08/2022		
D	11/08/2022		
Experiment No. 3 Implement Course Scheduling System using KANBAN method on JIRATool			
A	22/08/2022		
B	30/08/2022		
C	26/08/2022		
D	25/08/2022		
Experiment No. 4 To calculate function point for Course Scheduling System			
A	29/08/2022		
B	13/09/2022		
C	2/09/2022		
D	1/09/2022		
Experiment No.5 To estimate project cost using COCOMO Model for Course Scheduling			
A	12/09/2022		
B	20/09/2022		
C	9/09/2022		
D	8/09/2022		
Experiment No. 6 Develop diagrams for data flow analysis on Course Scheduling System			
A	19-09-22		
B	20-09-22		
C	16-09-22		
D	15-09-22		
Experiment No. 7 Implementation of data flow design pattern			
A	26-09-22		
B	22-09-22		
C	23-09-22		
D	22-09-22		
Experiment No. 8 Do design using Object Oriented approach and hence highlight Cohesion andCoupling in the design			
A	03-10-22		
B	27-09-22		
C	30-09-22		
D	29-09-22		

Experiment No. 9 To design test cases for performing black box testing for Course Scheduling / To design test cases for performing white box testing for Course Scheduling			
A	10-10-22		
B	27-09-22		
C	07-10-22		
D	06-10-22		
Experiment No. 10 Version controlling & Risk Analysis of the project Bidirectional			
A	10-10-22		
B	11-10-22		
C	14-10-22		
D	13-10-22		

Submitted By	**Approved By**
	Prof. RoshniPadate Sign:
Dr. B. S. Daga	
Date of Submission:	**Date of Approval:**
Remarks by DQAC (if any)	