

BCSE301P	Software Engineering Lab	L	T	P	C
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Pre-requisite	NIL	Syllabus version			
		1.0			
Course Objectives					
1. To introduce the essential Software Engineering concepts.					
2. To impart concepts and skills for performing analysis, design ,develop, test and evolve efficient software systems of various disciplines and applications					
3. To make familiar about engineering practices, standards and metrics for developing software components and products.					
Course Outcome					
On completion of this course, student should be able to:					
1. Demonstrate the complete Software life cycle activities from requirements analysis to maintenance using the modern tools and techniques.					
Indicative Experiments					
1.	Analysis and Identification of the suitable process models				
2.	Work Break-down Structure (Process Based, Product Based, Geographic Based and Role Based) and Estimations				
3.	Requirement modelling using Entity Relationship Diagram(Structural Modeling)				
4.	Requirement modelling using Context flow diagram, DFD (Functional Modeling)				
5.	Requirement modelling using State Transition Diagram (Behavioral Modeling)				
6.	OO design – Use case Model, Class Model				
7.	OO design – Interaction Models				
8.	OO design – Package, Component and deployment models				
9.	Design and demonstration of test cases. Functional Testing and Non- Functional Testing (using any open source tools)				
10.	Story Boarding and User Interface design Modelling				
Total Laboratory Hours				30 hours	
Text Book(s)					
1.	Ian Somerville, Software Engineering, 10 th Edition, Addison-Wesley, 2015				
Reference Books					
1.	Roger S. Pressman and Bruce R. Maxim, Software Engineering: A Practitioner's Approach, 10 th edition, McGraw Hill Education, 2019				
2.	William E. Lewis, Software Testing and Continuous Quality Improvement, Third Edition, Auerbach Publications, 2017				
Mode of assessment: Continuous assessments, FAT.					
Recommended by Board of Studies		04-03-2022			
Approved by Academic Council		No. 65	Date	17-03-2022	