SCHEME OF COURSE WORK

Course Details:

Course Title	**SOFTWARE TESTING AND CASE TOOLS LAB**		
Course Code	**: 15IT2117**	**L P C**	**: 0 3 2**
Program:	**: M.Tech.**		
Specialization:	**: Software Engineering**		
Semester	**: II semester**		
Prerequisites	**Software engineering.**		
Courses to which it is a prerequisite	**Software project management.**		

Course Outcomes (COs):

1	Write test suites for a given software.
2	Demonstrate testing process in Selenium IDE
3	Test websites using eclipse
4	Draw different UML diagrams
5	Develop models using UML tools.

Program Outcomes (POs):

A post graduate of software engineering will be able to

1	Ability to demonstrate in-depth knowledge of Software Engineering with analytical and synthesizing skills.
2	Ability to analyze complex problems critically and provide viable solutions.
3	Ability to evaluate potential solutions to a problem and arrive at optimal solutions.
4	Ability to apply research methodologies to develop innovative techniques for solving complex Information Technology related problems
5	Ability to apply techniques and tools to solve complex problems
6	Ability to work as an effective team member in a collaborative and multidisciplinary project to achieve common goals
7	Ability to manage a software team and to maintain financial records as per standards.
8	Ability to effectively communicate with clients, peers and society at large.
9	Ability to take up lifelong learning to be in tune with the fast-changing software related technologies
10	Ability to follow ethical practices in the software industry and accept social responsibility.
11	Ability to learn independently from mistakes and surge forward with positive attitude and enthusiasm.

Course Outcome Versus **Program Outcomes:**

COs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**
CO-1	S		M		S		S	S	S		M

CO-2	S	S	S		S				S		S
CO-3	S	M	M		S						S
CO-4	S		S	M	S				M		M
CO-5	S		S	M	S	M			M		

S - Strongly correlated, *M* - *Moderately* correlated, *Blank* - *No correlation*

Assessment Methods:	Mid-Test / End Exam

Teaching-Learning and Evaluation

Week	TOPIC / CONTENTS	Course Outcomes	Sample questions	TEACHING-LEARNING STRATEGY	Assessment Method & Schedule
1	Implement Automation Testing Approach.	CO-1	Implement Automation Testing Approach.	Implementing programs	**Mid-Test 1**
2	Using Selenium IDE, Write a test suite containing minimum 4 test Cases.	CO-1	Using Selenium IDE, Write a test suite containing minimum 4 test Cases.	Implementing programs	**Mid-Test 1**
3	Develop a test suite for any two web sites.	CO-1	Develop a test suite for any two web sites.	Implementing programs	**Mid-Test 1**
4	Install Selenium server and demonstrate it using a script in Java .	C0-2	Install Selenium server and demonstrate it using a script in Java .	Implementing programs	**Mid-Test 1**
5	Write and test a program to login on any web page.	C0-3	Write and test a program to login on any web page.	Implementing programs	**Mid-Test 1**
6	Write and test a program to update N student records in any file.	C0-3	Write and test a program to update N student records in any file.	Implementing programs	**Mid-Test 1**
7	Mid-Test 1				
8	Write and test a program to categorize a set of students based on the performance grading system.	CO-3	Write and test a program to categorize a set of students based on the performance grading system.	Implementing programs	**Mid-Test 2**
9	Write and test a program to provide total number of objects available on a web page	CO-3	Write and test a program to provide total number of objects available on a web page	Implementing programs	**Mid-Test 2**
10	Write and test a program to get the number of items listed in a combo box on a web page .	CO-3	Write and test a program to get the number of items listed in a	Implementing programs	**Mid-Test 2**

			combo box on a web page .		
11	Write and test a program to count number of check boxes on any web page	CO-3	Write and test a program to count number of check boxes on any web page.	Implementing programs	**Mid-Test 2**
12	The student should take up the case study of Unified Library application which is mentioned in the theory, and Model it in different views i.e Use case view, logical view, component view, Deployment view, Database design, forward and Reverse Engineering, and Generation of documentation of the project	CO-4	Draw use case diagram for Library management system. Draw class diagram for Library management system.	Drawing diagrams	**Mid-Test 2**
13	Student has to take up another case study of his/her own interest and do the same what ever mentioned in first problem. Some of the ideas regarding case studies are given in REFERENCES which were mentioned in theory syllabus can be referred for some idea.	CO-5	Draw sequence diagram for ATM transactions. Draw component diagram for IRCTC system.	Drawing diagrams	**Mid-Test 2**
14	**Mid-Test 2**				
15/16	**END EXAM**				