SCHEME OF COURSE WORK

Course Details:

Course Title	**SOFTWARE TESTING AND CASE TOOLS LAB**		
Course Code	**: 13IT2118**	**L T P C**	**: 0 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	Understands the Automation Testing Approach
2	Write test suites for software
3	Install Selenium server and demonstrate it using a script in Java/PHP
4	Write and test a program to login a specific web page.
5	Write and test a program to update 10 student records into table into Excel file
6	Write and test a program to get the number of list items in a list / combo box.

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		
CO-6	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	Understands the Automation Testing Approach.	CO-1	Understands the Automation Testing Approach.	Writing programs	Mid-Test 1
2	Using Selenium IDE, Write a test suite containing minimum 4 test	CO-2	Using Selenium IDE, Write a test suite containing minimum 4 test	Writing programs	Mid-Test 1
3	Conduct a test suite for any two web sites.	CO-2	Conduct a test suite for any two web sites.	Writing programs	Mid-Test 1
4	Install Selenium server and demonstrate it using a script in Java/PHP	C0-3	Install Selenium server and demonstrate it using a script in Java/PHP	Writing programs	Mid-Test 1
5	Write and test a program to login a specific web page.	C0-4	Write and test a program to login a specific web page.	Writing programs	Mid-Test 1
6	The student should take up the case study of Unified Library application which is mentioned in the theory, and Model it in different	C0-6	Draw use case diagram for Library management system. Draw class diagram for	Drawing diagrams	Mid-Test 1

	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		Library management system.		
7	**Mid-Test 1**				
8	Write and test a program to update 10 student records into table into Excel file	CO-5	Write and test a program to update 10 student records into table into Excel file	Writing programs	**Mid-Test 2**
9	Write and test a program to select the number of students who have scored more than 60 in any one subject (or all subjects)	CO-5	Write and test a program to select the number of students who have scored more than 60 in any one subject (or all subjects)	Writing programs	**Mid-Test 2**
10	Write and test a program to provide total number of objects present/ available on the page	CO-6	Write and test a program to provide total number of objects present/ available on the page	Writing programs	**Mid-Test 2**
11	Write and test a program to get the number of list items in a list / combo box.	CO-6	Write and test a program to get the number of list items in a list / combo box.	Writing programs	**Mid-Test 2**
12	Write and test a program to count number of check boxes on the page checked and unchecked count	CO-6	Write and test a program to count number of check boxes on the page checked and unchecked count	Writing programs	**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-6	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**				