**L T P C**

**III Year – I Semester**

**4 0 0 3**

**UML AND SOFTWARE ENGINEERING LAB**

**COURSE OBJECTIVE:**

The Software Engineering lab will facilitate the students to develop a preliminary yet practical understanding of software development process and tools

**List of Experiments:**

Take any real time problem and do the following experiments

1. Do the Requirement Analysis and Prepare SRS

2. Design all UML Diagrams

3. Using COCOMO model estimate effort.

4. Calculate effort using FP oriented estimation model.

5. Develop Time-line chart and project table using PERT or CPM project

scheduling methods.

6. Draw E-R diagrams, DFD, CFD and structured charts for the project.

7. Design of Test cases based on requirements and design.

8. Prepare Version control and change control for software configuration items

**COURSE OUTCOMES:**

Students successfully completing this course will be able to:

* Identify the purpose and methods of use of common object-oriented design patterns
* Select and apply these patterns in their own designs for simple programs
* Represent the data dependencies of a simple program using UML
* Represent user and programmatic interactions using UML
* Create design documentation outlining the testable and complete design of a simple program
* Produce and present documents for the purpose of capturing software requirements and specification
* Produce plans to limit risks specific to software designed for use in a particular social context