

## OBJECT ORIENTED MODELLING LABORATORY

| IV Semester: IT   |          |                              |   |                              |         |               |                          |       |
|---|----------|------------------------------|---|------------------------------|---------|---------------|--------------------------|-------|
| Course Code   | Category | Hours / Week                 |   |                              | Credits | Maximum Marks |                          |       |
| AITC08  | Core     | L                            | T | P                            | C       | CIA           | SEE                      | Total |
|   |          | 0                            | 0 | 3                            | 1.5     | 30            | 70                       | 100   |
| <b>Contact Classes: Nil</b>   |          | <b>Tutorial Classes: Nil</b> |   | <b>Practical Classes: 36</b> |         |               | <b>Total Classes: 36</b> |       |
| <b>Prerequisites: No Prerequisites</b>  |          |                              |   |                              |         |               |                          |       |
| <p><b>I. Course Overview:</b><br/>           This course is intended to provide an in depth understanding of object oriented approaches to software development, in particular to the analysis and design phases of the software life cycle. Instead of viewing the problem domain as a sequence or set of procedures, the emphasis in OOAD is on entities that interact with one another while making a design closer to the problem domain.</p> <p><b>II. Course Objectives:</b></p> <ol style="list-style-type: none"> <li>I. The basic and advanced building blocks of Unified Modeling Language for analysis and design of software systems.</li> <li>II. The Object-oriented approach for analysis and design of System/Subsystem/Functional units based on the given specifications through UML Diagrams.</li> <li>III. The implementation of design document of real time software applications using advanced CASE tools.</li> </ol> <p><b>III. COURSE SYLLABUS</b></p> <p><b>Week-1: INTRODUCTION TO UML</b><br/>           Study Of UML</p> <p><b>Week-2: ON LINE PURCHASE SYSTEM</b><br/>           Create a UML model for On line Purchase System</p> <p><b>Week-3: LIBRARY MANAGEMENT SYSTEM</b><br/>           Create a UML model for Library Management System</p> <p><b>Week-4: E-TICKETING</b><br/>           Create a UML model for E-Ticketing</p> <p><b>Week-5: QUIZ SYSTEM</b><br/>           Create a UML model for Quiz System</p> <p><b>Week-6: STUDENT MARK ANALYZING SYSTEM</b><br/>           Create a UML model for Student Mark Analyzing System</p> <p><b>Week-7: E-MAIL CLIENT SYSTEM</b><br/>           Create a UML model for E-Mail Client System</p> <p><b>Week-8: TELEPHONE PHONE DIALING</b><br/>           Create a UML model for Telephone Phone Dialing</p> <p><b>Week-9: INTRODUCTION TO UML</b><br/>           Create a UML model for Point of sale</p> <p><b>Week-10: POINT OF SALE</b><br/>           Create a UML model for a Working Company</p> <p><b>Week-11: WORKING COMPANY</b><br/>           Create a system to design Bank ATM Transactions and generate code by using MS-Access as back end and VB as the front end.</p> |          |                              |   |                              |         |               |                          |       |

## **Week-12: ATM TRANSACTIONS**

Create a system to design Student mark analysis system and generate code by using MS-Access as back end and VB as the front end.

### **Reference Books:**

1. Grady Booch, James Rumbaugh, Ivar Jacobson, "The Unified Modeling Language User Guide", Pearson Education, 2<sup>nd</sup> Edition, 2004.
2. Craig Larman, "Applying UML and Patterns: An Introduction to Object Oriented Analysis and Design and Iterative Development", Pearson Education, 3<sup>rd</sup> Edition, 2005.

### **Web References:**

1. [www.uml.org](http://www.uml.org)
2. [www.holub.com/goodies/uml/](http://www.holub.com/goodies/uml/)
3. [www.uml-diagrams.org/](http://www.uml-diagrams.org/)
4. [https://www.utdallas.edu/.../UML.../Rumbaugh--UML\\_2.0\\_Reference\\_C](https://www.utdallas.edu/.../UML.../Rumbaugh--UML_2.0_Reference_C)