

III YEAR SEM-I B.Tech CSE	ELECTIVE	L	T	P	C
Code: CS3507	OBJECT ORIENTED ANALYSIS AND DESIGN	2	2	0	4

Unit I

Introduction to UML: Importance of modeling, principles of modeling, object oriented modeling, conceptual model of the UML, Architecture, and Software Development Life Cycle.

Unit II

Basic Structural Modeling: Classes, Relationships, Common Mechanisms, and diagrams.

Advanced Structural Modeling: Advanced classes, advanced relationships, Interfaces, Types and Roles, Packages.

Unit III

Class & Object Diagrams: Terms, concepts, modeling techniques for class & object diagrams

Unit IV

Basic Behavioral Modeling: Interactions, Interaction diagrams, Use cases, Use case diagrams, Activity Diagrams.

Unit V

Advanced Behavioral Modeling: Events and signals, state machines, processes and threads, time and space, state chart diagrams.

Unit VI

Architectural Modeling: Component, Deployment, Component diagrams and Deployment diagrams and case study.

Text Books:

1. Grady Booch, James Rumbaugh, Ivar Jacobson: "The Unified Modeling Language User Guide", Pearson Education

2. Hans-Erik Eriksson, Magnus Penker, Brian Lyons, David Fado: UML 2 Toolkit, WILEY-Dreamtech India Pvt.Ltd.

Reference Books:

1. Meilir Page-Jones: Fundamentals of Object Oriented Design in UML, Pearson Education.

2. Atul Kahate: Object Oriented Analysis & Design, The McGraw-Hill Companies

Video Reference links:

Title	Expert Name	Details of Expert	Web link
OOAD I to III Lectures from Management Information System lectures	Prof. Biswajit Mahanty	IIT Kharagpur	http://nptel.ac.in/courses/122105022/