

Object Technology & UML

Code: CS 605

Credits: 3

Module I

Introduction

Why object orientation, History and development of Object Oriented Programming language, concepts of object oriented programming language.

Object oriented analysis

Usecase diagram; Major and minor elements, Object, Class.

Module II

Object oriented design

Relationships among objects, aggregation, links, relationships among classes- association, aggregation, using, instantiation, meta-class, grouping constructs.

Module III

Basic concepts of object oriented programming using Java

Object, class, message passing, encapsulation, polymorphism, aggregation, threading, applet programming, difference between OOP and other conventional programming-advantages and disadvantages.

Module IV

Fundamentals of Object Oriented design in UML

Static and dynamic models, why modeling, UML diagrams: Class diagram, interaction diagram: collaboration diagram, sequence diagram, statechart diagram, activity diagram, implementation diagram, UML extensibility- model constraints and comments, Note, Stereotype.