

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc – Information Technology (Integrated)**  
**Semester: VI**  
**Syllabus with Effect from: June - 2014**

<b>Paper Code: PS06CIIT01</b>	<b>Total Credit: 3</b>
<b>Title of Paper: Software Engineering - II</b>	

Unit	Description in Detail	Weightage (%)
I	<b>Object Oriented Concepts and principles</b> Concepts: Classes & Objects, Relationship among objects, Inheritance and Polymorphism, Design Concept, Design Notation and Specification Design Methodology (Dynamic Modeling, Functional Modeling, Defining internal classes and operations, optimize and package. Design Concepts , Design Model	25%
II	<b>Component Level Design</b> Views of component Designing Class-Based Components Conducting Component -Level Design Component Based Development	25%
III	<b>User Interface Design</b> Golden Rules of User Interface Design User Interface Analysis and Design Interface Analysis Interface Design Steps WebApp Interface Design	25%
IV	<b>Software Testing Strategies</b> Strategic Approach to Software Testing Test Strategies for Conventional Software Test Strategies for Object Oriented Software Test Strategies for WebApps; System Testing White-Box Testing (Basis Path Testing , Control Structure Testing ); Black-Box Testing (Graph-Based Testing Methods, Equivalence Partitioning) Overview Object Oriented Application Testing , Testing OOA and OOD Models , Object Oriented Testing Strategies	25%

**Basic Text & Reference Books:**

- Software Engineering a practitioner's approach by Roger S. Pressman, Tata McGraw-Hill, Seventh Edition
- An Integrated Approach to Software Engineering by Pankaj Jalote ,Narosa Publishing House, Second Edition,1997

