



**SE-577**

## **SOFTWARE REUSE TECHNIQUES**

### **UNIT-I**

Software Reuse Success Factors  
Reuse Driven Software Engineering Business  
Object Oriented Software Engineering  
Applications and Component Subsystem  
Use case Components  
Object Components

### **UNIT-II**

**Design Patterns:** Introduction  
**Creational Patterns:** Factory, Factory Method, Abstract Factory, Singleton, Builder Prototype.

### **UNIT-III**

**Structural Patterns:** Adapter, Bridge, Composite, Decorator, Fiacade, Flyweiht, Proxy.  
**Behavioral Patterns:** Chain of Responsibility, Command, Interpreter.

### **UNIT-IV**

**Behavioral Patterns:** Iterator, Mediator, Momento, Observer, Stazte, Strategy, Template, Visitor, Other  
Design Pattern: Whole Part, Master-Slave, View Handler-Reciever, Client-Dispatcher-Server, Publisher-Subscriber.

### **UNIT-V**

**Architectural Patterns:** Layers, Pipes and Filters, Black Board, Broker, Model View Controller.

**Presentation:** Abstraction-Control, Micro Kernet, Reflection.

### **Suggested Reading:**

1. Ivar Jacobson, Martin Griss, Patrick Kohnson “*Software Resue. Architecture, Process and Organisation for Business for Business Success*”, ACM Press, 1997.
2. Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides “*Design Patterns*”, Addison, 1995, Pearson Education,
3. Frank Buschmann etc. – *Pattern Oriented Software Architecture – Volume 1*, Wiley 1996.
4. James W Cooper “*Java Design Patterns, A Tutorial*”, Addison 2000, Pearson Education