



CS-576

## 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, Facade, Flyweicht, 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