1. Introduction to information systems development
   1.1 System analysis & design: an overview
   1.2 System analyst & users: Responsibilities
   1.3 Business information systems: categories
   1.4 Software, software characteristics.
   1.5 Problems with the software development
   1.6 Software development process models
      1.6.1 Waterfall model
      1.6.2 Prototyping
      1.6.3 Spiral model

2. Requirement Analysis & specifications
   2.1 Fact finding techniques
   2.2 Structured analysis: tools & techniques
   2.3 Data flow diagrams, E-R diagrams
   2.4 Data dictionary
   2.5 Characteristics, components of Requirement specification
   2.6 Software requirement specification document

3. System Design
   3.1 Design concepts & principles
   3.2 Design tools & techniques
   3.3 Various components of design
   3.4 Design methodology
   3.5 Design documentation

4. Testing & Implementation
   4.1 Testing fundamentals
   4.2 Functional testing
   4.3 Structural testing
   4.4 Testing process

Case studies may be carried out at appropriate stages of the course.
Reference Books:

5. Elements of system analysis - Marvin Gore - Galgotia Publ
8. Fundamentals of Software Engineering – Carlo Ghezzi
9. Software Reuse – Ivar Jacobson Martin Gris
10. Systems analysis & Design and the transition to objects:Sandra D Dewitz, McGraw Hill
11. System analysis & design methods: Whitten, Bentley & Barlow, Galgotia, 1995
12. The practical guide to structured Systems analysis Design, melilier Page-Jones, PHI
13. IEEE standard for software user documentation, std 1063-1987
14. Software engineering- A programming approach, D. Bell, I. Morrey, PHI