| CS110 | System Analysis and Design | L | T | P |
|-------|----------------------------|---|---|---|
|       |                            | 3 | 1 | 0 |

Introduction to Software System: Software crisis, Software Characteristics, Development lifecycle, Specification, Analysis, Design, Implementation and Testing.

Modular top-down analysis, design and testing, Project Feasibility, System Requirements Analysis, Fact Finding Techniques, Data Flow Diagram, Data Dictionary, Decision Tree, Decision Tables, Structured English, Systems Proposal.

System Design, CASE tools for system analysis and design, data modeling and process modeling (data flow diagrams, entity relationship diagrams), traditional and prototyping approaches, Object-Oriented Analysis and Modeling, design and development of relational database systems.

I/O design, input validation and user interface design (GUI).

*Suggested Readings:*

1. E. M. Awad, Systems Analysis and Design, McGraw-Hill Professional.
2. J. L. Whitten, Lonnie D. Bentley and Kevin C. Dittman, Systems Analysis and DesignMethods, McGraw-Hill.
3. K. E. Kendall, Systems Analysis and Design, Pearson Education.
4. V. Rajaraman, "System Analysis and Design", Prentice Hall.
5. J. A. Sern, "Analysis & Design of Information System", McGraw Hill.