



Course Title: SOFTWARE PROJECT DESIGN & ANALYSIS

Course Code: CSIT303 Credit Units:03

Course Objectives:

L	T	P/S	SW/F W	TOTAL CREDIT UNITS
3	-	-	-	3

systems

- The objective of this course is to provide adequate understanding of systems concept, system analysis, and design, which would help them in having efficient and workable information system for management.
- To provide an understanding the role of Hardware and Software for realizing organizational Objectives and automation.
- To provide an understanding of the role of systems analyst and software development firms for their role in distributing meaningful ERP modules and other business intelligent system
- To provide an understanding of the role of system analysis and design within various systems development stages.
- To develop an awareness of the different approaches that might be taken to systems design.
- To understand the activities of the management and systems analyst, and in the overall development of system.
- To develop an understanding of Testing software and complying the various software quality parameters.
- To develop an understanding of how to migrate old data within newly developed system with the help of various techniques.

Pre-requisites:

- Students should know the basic computing terminologies, Internet, software and hardware and use of Networking.
- Role of management, resources and effectiveness of system in overall accomplishment of organizational objectives.

Student Learning Outcomes:

- Able to apply different system development lifecycle models and explain the contribution of the systems analysis and design within them;
- Able to apply various approaches to systems analysis and design and explain their role and evaluate the tools and techniques of systems analysis that may be used in designing system.
- Apply/Use appropriate methods and techniques to produce an analysis of a given problem.
- Use structured methods and techniques to produce a system design for an given problem;

- Use of feasibility report in analyzing and projecting candidate system.
- Apply the applications and online ERP of computing in different context
- Apply the professional and ethical responsibilities of practicing the computer professional including understanding the need for quality driven software design
- Plan and undertake a major individual project, prepare and deliver coherent and structured verbal and written technical reports
- Apply various technique of during Data Conversion and Testing

Course Contents/Syllabus:

	Weightage (%)
Module I – Understanding System Concepts and Use within Industry	15
Importance and Meaning of System, Data and Information Role of system / Information system in creating effective organization, Role of automation system in business process and integrated business modules-manufacturing and service industry Types of Systems and its element.	
Module II – Understanding Software Project, System Analysis and Design	15
Understanding the Meaning of Project and Software Project Management Understanding the meaning of System Analysis and Design Figure out various reasons for Conducting system analysis Role of Management in conducting system analysis to cater competition and incorporating latest technology within the process Role of System Analyst and its function Attributes of System Analyst	
Module III – Requirement Determination and Development Life Cycle	20
Understanding the needs for developing/upgrading system Defining the type of system-Integrated, stand alone, Automated and Online based System Methods / tools used for collecting and recording facts and requirements from users Introduction of System Development Life Cycle (SDLC)	
Module IV Feasibility Study and Negotiation	15
Understanding / Importance of Feasibility Study/ Analysis Various Consideration while conducting Feasibility Study Steps of Conducting Feasibility Study Understanding feasibility Aspects: - Economical, Technological and Behavioral Preparing Feasibility report and presenting final draft for system proposal Negotiation strategy	

Module V- System Analysis, Design and Testing Software Project Planning Understanding the structured Tools- System Flow Chart, Data Flow Diagram, Data Dictionary, Decision Table, Decision Tree, and structured English for defining system specification with examples. Designing candidate system using structured tools Steps in Designing system Designing of –output system, input system, process, file design/Data base and interfaces Understanding the role of testing and its types	20
Module VI – System Implementation/ Maintenance and Review Understanding the importance of Implementation within organization Training to the Users on candidate system Conversion Strategy / integrating old system into new system Choosing the best implementation strategy Maintenance plan/ AMC Review of organizational effectiveness Understanding the various reasons for success and failure of ERP system within organization	15

Pedagogy for Course Delivery:

The class will be taught using theory and case based method. In addition to assigning the case studies, the course instructor will spend considerable time in understanding the concept of innovation through the eyes of the consumer. The instructor will cover the ways to think innovatively liberally using thinking techniques.

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
100%	NA	70

Theory Assessment (L&T):

Continuous Assessment/Internal Assessment					End Term Examination
Components (Drop down)	Mid-Term Exam	Project	Viva	Attendance	
Weightage (%)	10%	10%	5%	5%	70%

Text & References:

- Avison, D. and Fitzgerald, G. Information systems development: methodologies, techniques and tools, McGraw-Hill
- Silver and Silver, System Analysis and Design, Addison Wesley
- James A. Senn-Analysis and Design of Information Systems
- System Analysis and Design, Elias M Awad