

**Course Code: CSE136/226**  
**Course Title: Software Project I**  
**Credit: 1**

**Course Syllabus:**

**Introduction to Software and Software Projects:** Define software, Importance of software in modern businesses, Software development life cycle, Software project management fundamentals.

**Business and Entrepreneurship Fundamentals:** Understanding business and entrepreneurship, Role of software in driving business innovation, identifying market opportunities for software solutions.

**Exploring Business Domains and Risk in Business and Entrepreneurship:** Defining domains of business (e.g., healthcare, finance, education, and e-commerce), Analyzing domain, specific challenges and opportunities, Identifying potential risks in business and entrepreneurship, Strategies for managing and mitigating risks, Case studies of businesses facing risks and their approaches to overcoming challenges.

**Case Studies of Successful Software Applications:** Analysis of real, world successful software products, Lessons learned from their development and implementation, Identifying factors contributing to their success.

**Target Audience and Stakeholder Identification:** Defining target audiences and stakeholders for software projects, Importance of understanding user needs and expectations, Conducting user surveys and market research.

**Developing a Business Case:** Formulating a business case for a software project, Justifying the project's feasibility and potential impact, Addressing financial, technical, and operational aspects.

**Problem Identification and Solution Strategies:** Identifying business problems that can be addressed through software, Strategies for problem-solving using software solutions, Innovation and creativity in problem-solving.

**Selecting Successful Software Domains:** Evaluating potential domains for software development, Factors influencing the choice of a software domain, Matching domain strengths with market demands.

**Project Proposal / Innovation Challenge:** Students work in teams to select a software domain and identify a business problem, Develop a preliminary business case and software solution concept, Present their project proposal to the class.

**Course Description / Rationale:**

This course introduces fundamental concepts of software development, project management, business fundamentals, and problem-solving skills within the context of software projects. Students will learn how to identify and analyze business domains, evaluate potential software solutions, understand business risks, and develop problem-solving strategies to create successful software products.

**Course Objectives:**

By the end of this course, students will be able to:

1. Define the concepts of software and software projects.
2. Understand the relationship between software development and business entrepreneurship.
3. Analyze different business domains for potential software solutions.
4. Evaluate successful software applications as case studies.
5. Identify target audiences and stakeholders for software projects.
6. Formulate a business case for a software project, including risk assessment and management strategies.
7. Identify potential business risks and devise strategies to mitigate them.
8. Identify problems and devise solutions using software in a business context.

**Course Learning Outcomes (CLO's):**

CLO	Learning Outcomes
CLO 1	Understand software fundamentals and the role of the project lifecycle in business.
CLO 2	Analyze diverse business domains to identify software solutions for challenges.
CLO 3	Develop business cases, integrating risk management strategies.
CLO 4	Identify issues, innovate with creative software solutions, aligning with entrepreneurship.

**Assessment Rubric**

Course Title	Attendance 10	Lab Performance 25			Lab Report/Project 25			Lab Final/Project 40			Total
		Idea Presentation	Final Presentation	Viva	Assignment 1	Assignment 2	Assignment 3	Viva	Final Documentation	Project	
Software Project I	10	10	15	0	10	15	0	10	30	0	100
Software Project II	10	0	15	10	10	15	0	0	20	20	100
Software Project III	10	0	15	10	10	15	0	0	20	20	100
Software Project IV	10	0	15	10	10	15	0	0	20	20	100
Software Project V	10	0	15	10	10	15			20	20	100
Software Project VI	10	10	15		10	15	0	10	30	0	100