

<b>Course Title</b>	<b>Software Project Management</b>		
<b>Course Code</b>	<b>EC-340</b>		
<b>Credit Hours</b>	3 (2,1)		
<b>Category</b>	Computer Science Elective		
<b>Prerequisite</b>	None		
<b>Co-Requisite</b>	None		
<b>Follow Up</b>	None		
<b>Course Introduction</b>	This course provides an introduction to the key concepts, methods, and best practices needed to effectively manage software projects. Through a combination of lectures, case studies, and interactive discussions, students will gain insights into the entire software development lifecycle, from ideation to deployment, while emphasizing time management, budgeting, stakeholder communication, and risk management.		
<b>Course Learning Outcomes (CLOs)</b>	At the end of the course, the students will be able to:	<b>BT</b>	<b>PLO</b>
	CLO1: Articulate the various phase in project management stages of SDLC and recognize the importance of each phase in the context of project management.	C2 (Explain)	1,2
	CLO2: Allocate and manage project resources, including human capital, time, and budget, to maximize efficiency and effectiveness.	C3 (Apply)	1,2,3,4
	CLO3: Identify potential project risks, assess their impact, and devise strategies to mitigate or respond to these risks.	C4 (Identify)	3,4
	CLO4: Implement modern project management tools and software to aid in task tracking, collaboration, and project monitoring.	C3 (Apply)	3,4,5
	CLO5: Determine the criteria for project success and employ evaluation techniques post-project to assess outcomes and derive lessons for future projects.	C4 (Differentiate)	3,4
<b>Course Description</b>	<p><b>Introduction:</b> Project Management. The Project Management Process Groups. Scope triangle, The S curve. <b>Five Phases of Project Management Life Cycle:</b> Defining, planning, executing, controlling, closing. Scope of project, Project Work Breakdown Structure (WBS), Project Time Management. <b>Estimate Activity Duration:</b> Causes of variation in activity duration, five methods of Estimating Activity Duration. <b>Project Networks:</b> Critical Path Method (CPM), Build the project network, Analysis of the project network, Project Evaluation Review Technique (PERT), Activity on Arrow, Activity on Node, GANTT Chart, Using MS-Project to draw GANTT chart and project Networks. <b>Project Proposal:</b> Purpose of the project proposal, Contents of the project proposal, Format of the Project Proposal. <b>Staffing and Personnel Planning:</b> Personnel Plan, Team structures, Democratic decentralized, Controlled Decentralized, Controlled Centralized, Coordination and communication issues, Maslow's need theory of motivation, Software Project Team Roles and Responsibilities, Risk Identification, Analysis and Management. <b>Project Management:</b> Integration Management. Scope Management. Cost Management. Quality Management. Human Resource Management. Communications Management. Risk Management. Procurement Management. Management Tools. <b>Configuration Management:</b> Change Management and Control, baselines, Version Control, Earned Value Analysis for Project Monitoring and Control. Examples of Earned Value Analysis, Project Quality Assurance Plans, SQA Process Project Quality Standards, Project Documents.</p>		
<b>Text Book(s)</b>	1. Guide to the Project Management Body of Knowledge (PMBOK® Guide), 6 <sup>th</sup> Edition, Project Management Institute, 2017, ISBN-10: 1628251840.		
<b>Reference Material</b>	1. Teresa Luckey, Joseph Phillips, Software Project Management for Dummies, 1st Edition, For Dummies Publisher, 2006, ISBN 0471749346.		