PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA (AUTONOMOUS) INFORMATION TECHNOLOGY

ELEMENTS OF SOFTWARE PROJECT MANAGEMENT (Professional Elective –III)

Course Code	urse Code 20IT4701C		IV	Semester	Ι
Course Category	PE3	Branch	IT	Course Type	Theory
Credits	3	L-T-P	3-0-0	Prerequisites	Software Engineering
Continuous Internal Evaluation:	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes					
Upon Successful completion of course, the student will be able to					
CO1	Understand the concepts of conventional software management and software economics	L2			
CO2	Gain the knowledge on software development lifecycle and artifacts	L3			
CO3	Understand the process workflows and milestones	L3			
CO4	Analyze the concepts of work break down structure, cost estimation and process automation	L3			

Strength of Correlation between CO – PO , CO- PSO in scale of 1-3

1: Slight (low), 2: Moderate (medium) 3: Substantial (High)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3													
CO2	3													
CO3	3													
CO4				3					3		3		3	3
Overall course	3			3					3		3		3	3

Syllabus						
Unit No	Contents	Mapped CO				
Ι	Conventional Software Management: The waterfall model, conventional software Management performance. Evolution of Software Economics: Software Economics, pragmatic software cost estimation. Improving Software Economics: Reducing Software product size, improving software processes, improving team effectiveness, improving automation, Achieving required quality, peer Inspections	CO1				
п	The old way and the new: The principles of conventional software Engineering, principles of modern software management, transitioning to an iterative process. Life cycle phases: Engineering and production stages, inception, elaboration, construction, transition phases. Artifacts of the process: The artifact sets, Management artifacts, Engineering artifacts, Programmatic artifacts	CO1,CO2				
ш	Model based software architectures: A Management perspective and technical perspective. Work Flows of the process: Software process workflows, Iteration workflows. Checkpoints of the process: Major mile stones, Minor Milestones, Periodic status assessments.	CO1,CO2				
IV	Iterative Process Planning: Work breakdown structures, planning guidelines, cost and schedule estimating, Iteration planning process, Pragmatic planning. Project Organizations and Responsibilities: Line-of-Business Organizations, Project Organizations, evolution of Organizations. Process Automation: Automation Building blocks, The Project Environment	CO1,CO3				
V	Project Control and Process instrumentation: The seven core Metrics, Management indicators, quality indicators, life cycle expectations, pragmatic Software Metrics, Metrics automation, Process discriminates.	CO1,CO4				
	Learning Resources					
Text Bo	Text Books					
Softwar	e Project Management, Walker Royce Pearson Education, 2009					
Referen						

Software Project Management, Bob Hughes and Mike Cotterell Tata McGraw- Hill Edition.
Software Project Management in Practice, Pankajjalot, Pearson Education