23CS32E5 –SOFTWARE PROJECT MANAGEMENT

Course Category:	Professional Elective - III	**Credits:**	3
Course Type:	Theory	**Lecture-Tutorial-Practical:**	3-0-0
Prerequisite:	• Knowledge in Software Project Management	**Sessional Evaluation:** **Univ. Exam Evaluation:** **Total Marks:**	30 70 100
Course Objectives:	**Students undergoing this course are expected:**		
	• This course is designed to enable the students to under stand the fundamental principles of Software Project management &will also have a good knowledge of the responsibilities of a project manager and how to handle them.		

Curse Outcomes:	**Upon successful completion of the course, the students will be able to:**	
	CO1	Describe the fundamentals of Project Management
	CO2	Recognize and use Project Scheduling Techniques
	CO3	Familiarize with Project Control Mechanisms
	CO4	Under stand Team Management
	CO5	Recognize the importance of Project Documentation and Evaluation..
Course Content:	**UNIT-I** **Conventional Software Management:** The water fall 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. . **UNIT-II** **The old way and the new:** The principles of convention al software Engineering, principles of modern software management, transitioning to aniter ative process. Lifecycle phases: Engineering and production stages, inception, Elaboration, construction, transition phases. **Artifacts of the process:** The artifact sets, Management artifacts, Engineering artifacts, programmatic artifacts **UNIT-III** **Work Flows of the process:** Software process work flows, Inter Trans work flows.Check points of the Process: Major Mile Stones, Minor Milestones, Periodic status assessments. Iterative Process Planning: work break down structures, planning guidelines, cost and schedule estimating, Iteration planning process, Pragmatic planning. **UNIT-IV** **Process Automation:** Automation Building Blocks, The Project Environment. Project Control and Process instrumentation: The sevencore Metrics, Management indicators, quality indicators Tailoring the Process: Process discriminants. Managing people and organizing teams. **UNIT-V** **Project Organizations and Responsibilities:** Line - of-Business Organizations, Project Organizations, evolution of Organizations.	

	Future Software Project Management: modern Project Profiles, Next generation Software economics, modern process stransitions. **Case Study**: The Command Center Processing and Display System-Replacement(CCPDS-R)
Text Books & References Books:	**TEXTBOOKS:** 1. Software Project Management, Walker Royce,Pearson Education,2012 2. BobHughes,MikeCotterellandRajibMall—SoftwareProjectManagement‖,6thEdition, Mc Graw Hill Edition, 2017 **REFERENCE BOOKS:** 1. PankajJalote,—SoftwareProjectManagementinpractice‖,5thEdition,PearsonEducation, 2017. 2. Murali K.Chemuturi,Thomas M.Cagley Jr.‖Mastering Software Project Management: Best Practices, Tools and Techniques‖, J.Ross Publishing, 2010 3. SanjayMohapatra,—SoftwareProjectManagement‖,CengageLearning,2011
E-Resources:	1. http://nptel.ac.in/courses/106101061/29