Course code: Course Title	Course Structure			Pre-Requisite
SE423: Software Project Management	L	T	P	NIL
	3	0	2	

Course Objective: To introduce concepts of software planning, estimation, and time scheduling.

S. NO	Course Outcomes (CO)
CO1	Understand project management concepts, process frameworks, and software life cycle models.
CO2	Apply cost and scheduling estimation models, including COCOMO II and Putnam.
CO3	Apply and analyze project management techniques, including risk management, tracking, and quality control.
CO4	Evaluate project closure processes and software management methodologies.
CO5	Evaluate advanced software project management practices and emerging trends.

S.No.	Contents	Contact Hours
UNIT 1	**Introduction:** Project Management concepts, Process Framework, Project Planning Software Life Cycle Models, Artifacts of the Project Management Process.	6
UNIT 2	**Cost and Scheduling Estimation Models:** Various Levels of COCOMO for Cost, Effort, Schedule and Productivity Estimation. Approaches to Effort, Cost Estimation, and Schedule Estimation factors through COCOMO II, Putnam Estimation Model, Algorithmic models.	8
UNIT 3	**Project Management Techniques**: Project Organizations and Responsibilities, Establishing Project Environment, Risk Management Process, Project Tracking and Control Defect Tracking Concepts such as Process monitoring and audit, Reviews, Inspections and Walkthroughs.	8
UNIT 4	**Project Closure:** Project Closure Analysis, Role of Closure Analysis in a project, Performing Closure Analysis, Closure Analysis Report.	6
UNIT 5	**Software Project Management Renaissance:** Conventional Software Management, Evolution of Software Economics, Improving Software Economics, The old way and the new way.	6
UNIT 6	**Advance Topics in Software Project Management:** Discussion on future Software Project Management Practices & Modern Project Profiles, Next Generation Software Economics, Modern Process Transitions.	8
	TOTAL	42

REFERENCES

S.No.	Name of Books/Authors/Publishers	Year of Publication / Reprint
1.	Watts S. Humphrey, "Managing the Software Process", Pearson Education.	1989
2.	Bob Hughes, Mike Cotterell, "Software Project Management", Tata McGraw Hill, 5th Edition.	2009
3.	Ian Sommerville, "Software Engineering", Addison Wesley, 10th Edition.	2017