SCHEME OF COURSE WORK

Department of Information Technology

Course Details:

COURSE TITLE	Software Process and Project Management		
COURSE CODE	10IT2103	L P C	4 - 3
PROGRAM	M.TECH		
SPECIALIZATION	SE		
SEMESTER	II		
PRE REQUISITES	Software Engineering		
COURSES TO WHICH IT IS A PRE REQUISITE	N/A		

Course Outcomes (COs):

CO No.	Course outcomes	Cognitive level
CO 1	Analyze software process maturity, its framework and the reference models.	Apply
CO 2	Understand the Capability Maturity Model and learn about conventional software management.	Apply
CO 3	Understand how to manage software projects and project planning.	Apply
CO 4	Analyze project tracking and control.	Apply& Create
CO 5	Understand the role of project closure analysis.	Apply & Create

Course Outcome versus **Program Outcomes**

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1: Analyze software process maturity, its framework and the reference models.	S	S		S		S	S	S	S		S
CO2: Understand the Capability Maturity	S	S	S	M			S		S		S

Model and learn about conventional software management.											
CO3: Understand how to manage software projects and project planning.	S	S				M	S	S			S
CO4: Analyze project tracking and control.	S	S				M	S	S	M		S
CO5: Understand the role of project closure analysis.	S	S				M	S	M	S	M	S

S - Strongly correlated, *M* - *Moderately* correlated, *Blank* - *No correlation*

Assessment Methods	Assignment / Quiz / Mid-Test

Teaching- Learning & Evaluation

Week	Topic/ Contents	Course Outcomes	Sample questions	Teaching learning strategy	Assessment method & schedule
1	Principles of Software Process Change, Software Process Assessment	CO1	1)Explain about Software Process Assessment.	Lecture	Assignment-1, Test- 1 Quiz-1
2	The Initial Process The Repeatable Process ,The Defined Process	CO1	1) Enumerate various steps in software standards Development Process.	Lecture	Assignment-1, Test- 1 Quiz-1
3	The Managed Process, The Optimizing Process.	CO1	1)Explain Optimizing process	Lecture	Assignment-1, Test- 1 Quiz-1
4	CMMi, PCMM, PSP, TSP, IDEAL, Process Definition Techniques.	CO2	1)Explain about CMMi Process reference model.	Lecture	Assignment-1, Test- 1 Quiz-1
5	Conventional Software Management, Evolution of Software Economics	CO3	1)Mention various modern process approaches for solving conventional problems.	Lecture	Assignment-1, Test- 1 Quiz-1
6	Improving Software Economics, The old way and the new way.	CO3	1) Explain the approaches for improving software economics	Lecture	Assignment-1, Test- 1 Quiz-1
7	Project Management and the CMM, Project Management and CMMi	CO2	1)Explain about managing software projects and CMM	Lecture	Assignment-1, Test- 1 Quiz-1
8	Project Management Process Framework.	CO2, CO3	1) Enumerate various artifacts of the Project Management Process and Project Framework	Lecture	Assignment-1, Test- 1 Quiz-1
9	Test-1			Lecture	
10	Software Life Cycle Models, Project Organizations and Responsibilities	CO3	1)Explain about the following: (a) Process Monitoring and audit (b) Core Metrics	Lecture	Assignment-2, Test- 2 Quiz-2
11	Artifacts of the Project Management Process , Cost and Scheduling estimation	CO3, CO4	1) Explain process monitoring and audit. 2) What are the artifacts of project management	Lecture	Assignment-2, Test- 2 Quiz-2

			process?		
12	Establishing Project Environment, Risk Management, Quality Assurance and Configuration Management	CO4	1)Explain about risk management in detail.	Lecture	Assignment-2, Test- 2 Quiz-2
13	Defect Tracking, Issue Tracking, Status Reports , Milestone Analysis	CO5	1)Explain the terms Defect tracking and milestone analysis.	Lecture	Assignment-2, Test- 2 Quiz-2
14	Defect Analysis and Prevention Methods, Process monitoring and audit	CO4	1)Give some ways of defect prevention methods.	Lecture	Assignment-2, Test- 2 Quiz-2
15	Reviews, Inspections and Walkthroughs, Seven Core Metrics , Management indicators, Quality Indicators	CO5	1)List out the Seven Core metrics	Lecture	Assignment-2, Test- 2 Quiz-2
16	Project Closure Analysis, Role of Closure Analysis in a project , Performing Closure Analysis, Closure Analysis Report	CO5	1)Explain the role of closure Analysis in a project.	Lecture	Assignment-2, Test- 2 Quiz-2
17	Modern Project Profiles, Next-Generation software Economics, Modern Process Transitions	CO5	1)Explain Next Generation software metrics.	Lecture	Assignment-2, Test- 2 Quiz-2
18	Test-2				