Software Project Management

Course Code	20CS4702B	**Year**	IV	**Semester**	I
Course Category	PEC	**Branch**	CSE	**Course Type**	Theory
Credits	3	**L-T-P**	3-0-0	**Prerequisites**	Software Engineering
Continuous Evaluation :	30	**Semester End Evaluation:**	70	**Total Marks:**	100

Course Outcomes		
Upon successful completion of the course, the student will be able to		
CO1	Understand the fundamentals of Project Management principles while developing software.	**L2**
CO2	Apply a suitable software process model to develop a project.	**L3**
CO3	Apply the effort Estimation techniques to prepare accurate project estimatio	**L3**
CO4	Analyze and estimate cost, risk and outline the project plan	**L4**

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**
CO1	3				1							1		
CO2									1			1		2
CO3	3		1						1			1		
CO4		2				1	1					1		

Syllabus		Mapped CO
Unit No.	**Contents**	
I	**Introduction to Software Project Management** Introduction, Why is Software Project Management Important?, Software Projects versus Other Types of Project, Activities Covered by Software Project Management, Traditional versus Modern Project Management Practices	**CO1**
II	**Project Evaluation and Programme Management** Introduction, A Business Case, Project Portfolio Management, Evaluation of Individual Projects, Cost–benefit Evaluation Techniques, Strategic Programme Management, Creating a Programme, Benefits Management	**CO1, CO2,CO4**
III	**Selection of an Appropriate Project Approach** Introduction, Build or Buy? Choosing Methodologies and Technologies, Software Processes and Process Models, The Waterfall Model, The Spiral Model, Software Prototyping.	**CO1, CO2,CO4**
IV	**Software Effort Estimation** Introduction, Problems with Over and Under-Estimates, The Basis for Software Estimating, COSMIC Full Function Points.	**CO1, CO3,CO4**
V	**Risk Management** Introduction, Risk, Categories of Risk, Risk Identification, Risk Assessment, Risk Planning, Risk Management.	**CO1, CO2,CO4**

Learning Resources

Text Books

1. Software Project Management, Bob Hughes, Mike Cotterell and Rajib Mall, Fifth Edition, Tata McGraw Hill, New Delhi, 2012.

References

1. –Software Project Management in Practice‖, Pankaj Jalote, 2002, Pearson, Education Asia.
2. –Information Technology Project Management‖, Jack T Marchewka, Third Edition (International Student Version) , Wiley India
3. –Project Management- Core Textbook‖, Samuel J mantel et‘al., First India Edition, Wiley India.

e-Resources & other digital material

1. https://nptel.ac.in/courses/106105218
2. https://www.digimat.in/nptel/courses/video/106105218/L01.html