

### Software Project Management

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

#### Course Outcomes

Upon successful completion of the course, the student will be able to

<b>CO1</b>	Understand the fundamentals of Project Management principles while developing software.	<b>L2</b>
<b>CO2</b>	Apply a suitable software process model to develop a project.	<b>L3</b>
<b>CO3</b>	Apply the effort Estimation techniques to prepare accurate project estimation	<b>L3</b>
<b>CO4</b>	Analyze and estimate cost, risk and outline the project plan	<b>L4</b>

#### Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
<b>CO1</b>	√											√		
<b>CO2</b>									√			√		√
<b>CO3</b>	√		√						√			√		
<b>CO4</b>		√				√						√		

Syllabus		Mapped CO
Unit No.	Contents	
I	<b>Introduction to Software Project Management</b> 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	<b>Project Evaluation and Programme Management</b> 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	<b>Selection of an Appropriate Project Approach</b> 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	<b>Software Effort Estimation</b> Introduction, Problems with Over and Under-Estimates, The Basis for Software Estimating, COSMIC Full Function Points.	CO1, CO3,CO4
V	<b>Risk Management</b> 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 Practicell, Pankaj Jalote, 2002, Pearson, Education Asia.
2. —Information Technology Project Managementll, Jack T Marchewka, Third Edition (International Student Version) , Wiley India
3. —Project Management- Core Textbookll, 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>