

## OBJECT ORIENTED SOFTWARE ENGINEERING

(Professional Elective – II)

<b>Course Code</b>	20IT4601C	<b>Year</b>	III	<b>Semester</b>	II
<b>Course Category</b>	PE-2	<b>Branch</b>	IT	<b>Course Type</b>	Theory
<b>Credits</b>	3	<b>L-T-P</b>	3-0-0	<b>Prerequisites</b>	SE
<b>Continuous Internal Evaluation :</b>	30	<b>Semester End Evaluation:</b>	70	<b>Total Marks:</b>	100

Course Outcomes		Blooms Taxonomy Level
<b>Upon Successful completion of course, the student will be able to</b>		
<b>CO1</b>	Understand the fundamental phases of software development and the Principles underlying Object-Oriented software design.	L2
<b>CO2</b>	Employ formal methods and different roles played to produce effective software designs as solutions to specific tasks.	L3
<b>CO3</b>	Develop structured sets of simple user-defined classes using Object-Oriented principles to achieve overall programming goals.	L3
<b>CO4</b>	Develop error identification and testing strategies for code Development.	L3
<b>CO5</b>	Understand modeling for a given problem for better development of the software product to have a high quality	L3

### 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
<b>CO1</b>	3													2
<b>CO2</b>	3		3											2
<b>CO3</b>	3				2									2
<b>CO4</b>	3					2								2
<b>CO5</b>	3					2				3				2

### Syllabus

Unit No	Contents	Mapped CO
<b>I</b>	<b>Software engineering:</b> software related problems, software engineering, concepts, development activities,	<b>CO1</b>
	<b>Project communications:</b> Project communication, modes, mechanisms And activities.	

<b>II</b>	<p><b>Requirements:</b> Requirements elicitation, concepts , activities and Managing requirements elicitation.</p> <p><b>Analysis:</b> Analysis overview, concepts, activities and managing analysis</p>	<b>CO2</b>
<b>III</b>	<p><b>System design:</b> Design overview, concepts, activities and managing System design.</p> <p><b>Object design:</b> Object Design Overview, concepts, activities and managing object design</p>	<b>CO3</b>
<b>IV</b>	<p><b>Rationale management:</b> Rational overview, concepts, activities and Managing rationale</p> <p><b>Testing:</b> Testing overview, concepts, activities and managing testing.</p>	<b>CO4</b>
<b>V</b>	<p><b>Software configuration management:</b> Configuration management overview, concepts, activities and managing configuration management</p> <p><b>Project management:</b> project management overview, concepts, activities and managing project management models and activities.</p>	<b>CO5</b>

<b>Learning Recourses</b>
<b>Text Books</b>
1.Object-oriented Software engineering: Conquering complex and changing systems, Bernd Bruegge and AllenH.Dutoit .Pearson Education Asia.,First edition.
<b>References</b>
1.Object-oriented software engineering: Practical software development using UML and Java Timothy C.lenthbridge and Robert Langanieri McGraw-Hill Higher Education.
<b>e-Resources&amp; other digital material</b>
NPTEL VIDEO LECTURES