



Swarnandhra College of Engineering & Technology
Autonomous and recognized under 2(F) and 12(B) by UGC
 Recognized by AICTE, permanently affiliated to JNTUK Kakinada
 Accredited by NAAC with 'A' Grade (2nd Cycle)
 Seetharamapuram, Narsapur – 530280 (Andhra Pradesh)



DEPARTMENT OF INFORMATION TECHNOLOGY
TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20IT4T01	OBJECT ORIENTED SOFTWARE ENGINEERING	IV	IT	5	2023-2024	03-01-2024

COURSE OUTCOMES

1	Discuss about software development process models
2	Analyze the planning and scheduling of a software project
3	Understand the object oriented analysis
4	Explain the design concepts and principles
5	Recognize the knowledge about testing methods and comparison of various testing techniques

UNIT	Out Comes / Bloom's Level	Topics No.	Topics/ Activity	Text Book/ Reference	Contact Hour	Delivery Method
I	CO – 1	1.1	Introduction to Software Engineering	T1,R1	1	Chalk & Board Power point presentation
		1.2	Software Development process models	T1,R1	1	
		1.3	Agile Development	T1,R1	1	
		1.4	Project & Process	T3	1	
		1.5	Project management	T3	1	
		1.6	Process & Project metrics	T3,R1	1	Assignment Test
		1.7	Object Oriented concepts	T4,R4	1	
		1.8	Principles	T4,R4	1	
		1.9	Methodologies	T4,R4	1	
Total					10	



Swarnandhra College of Engineering & Technology
Autonomous and recognized under 2(F) and 12(B) by UGC
 Recognized by AICTE, permanently affiliated to JNTUK Kakinada
 Accredited by NAAC with 'A' Grade (2nd Cycle)
Seetharamapuram, Narsapur – 530280 (Andhra Pradesh)

II	CO – 2	2.1	Planning& Scheduling	T2	1	Chalk & Board
		2.2	Software Requirements Specification	T2	1	
		2.3	Software prototyping	T2	1	
		2.4	Software project planning	T3	1	
		2.5	Scope	T3	1	
		2.6	Resources	T2	1	Power point presentatio n
		2.7	Software Estimation	T2	1	
		2.8	Empirical Estimation Models	T2	1	
		2.9	Planning	T2	1	Assignment
		2.10	Risk Management	T2	1	
		2.11	Software Project Scheduling	T3	1	
		2.12	Object Oriented Estimation& Scheduling	T4,R4	1	Test
		Content beyond syllabus		2.13	COCOMO Model	
Total					13	
III	CO - 3	3.1	Analysis	T2,R1	1	Chalk & Board
		3.2	Introduction for analysis	T2,R1	1	
		3.3	Analysis Modeling	T2,R1	1	
		3.4	Data Modeling	T2,R1	1	
		3.5	Functional Modeling	T1,R1	1	
		3.6	Information Flow	T1,R1	1	Power point presentatio n
		3.7	Behavioral Modeling	T1,R1	1	
		3.8	Structured Analysis	T1	1	
		3.9	Object Oriented Analysis	T4	1	Assignment
		3.10	Domain Analysis	T4	1	
		3.11	Object oriented Analysis process	T4	1	
		3.12	Object Relationship Model	T4	1	Test
		3.13	Object Behavior Model	T4	1	



Swarnandhra College of Engineering & Technology
Autonomous and recognized under 2(F) and 12(B) by UGC
 Recognized by AICTE, permanently affiliated to JNTUK Kakinada
 Accredited by NAAC with 'A' Grade (2nd Cycle)
Seetharamapuram, Narsapur – 530280 (Andhra Pradesh)



		3.14	Design modeling with UML	T4,R3	1	
				Total	14	
IV	CO – 4	4.1	Design Concepts	T4,R3	1	Chalk & Board
		4.2	Design Principles	T4,R3	1	
		4.3	Design Process	T4,R3	1	
		4.4	Modular Design	T4,R3	1	
		4.5	Design Effective Modularity	T4	1	
		4.6	Introduction to Software Architecture	T2	1	Power point presentation
		4.7	Data Design	T2	1	
		4.8	Transform Mapping	T2	1	
		4.9	Transaction Mapping	T4	1	Assignment
		4.10	Object Oriented Design	T4,R4	1	
		4.11	System design process	T4,R4	1	
		4.12	Object design process	T4,R4	1	
		4.13	Design Patterns	T4,R4	1	Test
Content beyond syllabus		4.14	SOLID Principles	T2	1	
				Total	14	
V	CO – 5	5.1	Implementation, Testing & Maintenance	T2,T3	1	Chalk & Board
		5.2	Top - Down	T2,T3	1	
		5.3	Bottom-Up	T2,T3	1	
		5.4	object oriented product Implementation & Integration	T2	1	Power point presentation
		5.5	Software Testing methods	T3	1	
		5.6	White Box	T3	1	
		5.7	Basis Path	T3	1	Assignment
		5.8	Control Structure	T3	1	
		5.9	Black Box	T3	1	
		5.10	Unit Testing	T3	1	Test
		5.11	Integration testing	T3	1	
		5.12	Validation testing	T3	1	



Swarnandhra College of Engineering & Technology
Autonomous and recognized under 2(F) and 12(B) by UGC
Recognized by AICTE, permanently affiliated to JNTUK Kakinada
Accredited by NAAC with 'A' Grade (2nd Cycle)
Seetharamapuram, Narsapur – 530280 (Andhra Pradesh)

	5.13	System testing	T3	1	
	5.14	Testing Tools	T3	1	
	5.15	Software Maintenance	T3	1	
	5.16	Reengineering	T3	1	
Total				16	
CUMULATIVE PROPOSED PERIODS				67	

Text Books:

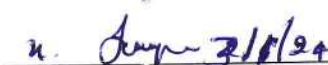
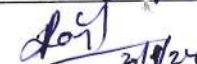
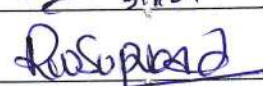
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	Roger. S. Pressman and Bruce R. Maxim, "Software Engineering – A Practitioner's Approach", seventh Edition, McGraw Hill, 2015.
2	Ian Sommerville, "Software Engineering", eighth edition, Pearson Education, New Delhi, 2011

Reference Books:

S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	Fairley R, "Software Engineering Concepts", second edition, Tata McGraw Hill, New Delhi, 2003.
2	Jalote P, "An Integrated Approach to Software Engineering", third edition, Narosa Publishers, New Delhi, 2013.

Web Details:

1	https://www.geeksforgeeks.org/software-engineering
2	https://www.tutorialspoint.com/design

	Name	Signature with Date
i. Faculty	Ms. U. Jenny grace	 31/8/24
ii. Module Coordinator	Mr. Ch. R. K. Raju	 31/8/24
iii. Programme Coordinator	Dr. RVSV Prasad	 31/8/24


Principal