SWARNANDHRA
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

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Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

TEACHING PLAN

Course Code	Course Title	Semester	Branches	Contact Periods /Week	Academic Year	Date of commencement of Semester
BTCS6 T02	**OBJECT ORIENTED ANALYSIS & DESIGN**	VI	CSE	5	2019-20	25-11-2019

COURSE OUTCOMES	
1	Identify the importance of modeling and object-oriented systems analysis and design (K1)
2	Design the basic structural modeling techniques using building blocks of UML.(K6)
3	Explain common modeling techniques for class and object diagrams. (K2)
4	Describe the basic behavioral and advanced behavioral modeling diagrams. (K1)
5	Illustrate the components and deployment diagrams (K3)
6	Apply Forward engineering techniques for a given case study. (K3)

UNIT	CO	Topics No.	Topics/Activity	Text Book / Reference	Contact Hour	Delivery method
I	Identify the importance of modeling and object-oriented systems analysis and design (K1)	**1.1**	Introduction to UML	**T1**	**1**	**Chalk and talk**
		1.2	Importance of modeling	**T1**	**1**	**Chalk and talk**
		1.3	principles of modeling	**T1**	**1**	**Chalk and talk**
		1.4	object oriented modeling	**T1**	**1**	**Chalk and talk**
		1.5	conceptual model of the UML	**T1**	**1**	**Chalk and talk**
		1.6	conceptual model of the UML	**T1**	**1**	**Chalk and talk**
		1.7	Architecture	**T1**	**1**	**Chalk and talk**
		1.8	Software Development Life Cycle	**T1**	**1**	**Chalk and talk**
		1.9	Software Development Life Cycle	**T1**	**1**	**Chalk and talk**
		Content beyond Syllabus	Unified process	**T1**	**1**	**PPT**
				Total	**10**	
II	Design the basic structural modeling techniques using building blocks of	**2.1**	Classes	**T1**	**1**	**Chalk and talk**
		2.2	Relationships	**T1**	**1**	**Chalk and talk**
		2.3	Common Mechanisms	**T1**	**1**	**Chalk and talk**
		2.4	Diagrams		**1**	**Chalk and talk**
		2.5	Advanced Structural Modeling:	**T1**	**1**	**Chalk and talk**
		2.6	Advanced classes	**T1**	**1**	**Chalk and talk**

		2.7	Advanced relationships	**T1**	**1**	**Chalk and talk**
		2.8	Interfaces	**T1**	**1**	**Chalk and talk**
		2.9	Types	**T1**	**1**	**Chalk and talk**
		2.10	Roles.	**T1**	**1**	**Chalk and talk**
		2.11	Packages	**T1**	**1**	**Chalk and talk**
		Content beyond Syllabus	Common modeling techniques	**T1**	**1**	**PPT**
				Total	**12**	
III	Explain common modeling techniques for class and object diagrams. (K2)	**3.1**	Introduction	**T1**	**1**	**Chalk and talk**
		3.2	Terms and concepts of Class Diagrams	**T1**	**1**	**Chalk and talk**
		3.3	modeling techniques for Class Diagrams	**T1**	**1**	**Chalk and talk**
		3.4	Introduction	**T1**	**1**	**Chalk and talk**
		3.5	Terms and concepts of Object Diagrams	**T1**	**1**	**Chalk and talk**
		3.6	Modeling techniques for Object Diagrams.	**T1**	**1**	**Chalk and talk**
		Content beyond Syllabus	**ATM application class and object diagram**	**T1**	**1**	**PPT**
				Total	**07**	
IV	Describe the basic behavioral and advanced behavioral modeling diagrams. (K1)	**4.1**	Interactions	**T1**	**1**	**Chalk and talk**
		4.2	Interaction diagrams	**T1**	**1**	**Chalk and talk**
		4.3	Sequence diagram	**T1**	**1**	**Chalk and talk**
		4.4	Collaboration diagram	**T1**	**1**	**Chalk and talk**
		4.5	Basic Behavioral Modeling - II:	**T1**	**1**	**Chalk and talk**
		4.6	Use cases	**T1**	**1**	**Chalk and talk**
		4.7	Use case Diagrams	**T1**	**1**	**Chalk and talk**
		4.8	Activity Diagrams	**T1**	**1**	**Chalk and talk**
		4.9	Modeling techniques	**T1**	**1**	**Chalk and talk**
		4.10	Advanced Behavioral Modeling: Events	**T1**	**1**	**Chalk and talk**
		4.11	Signals	**T1**	**1**	**Chalk and talk**
		4.12	state machines	**T1**	**1**	**Chalk and talk**
		4.13	processes and Threads	**T1**	**1**	**Chalk and talk**
		4.14	time and space	**T1**	**1**	**Chalk and talk**
		4.15	state chart diagrams.	**T1**	**1**	**Chalk and talk**
		Content beyond Syllabus	Credit card validation Usecase and activity diagram	**T1**	**1**	**PPT**
				Total	**16**	

V	Illustrate the components and deployment diagrams (K3)	**5.1**	Components	**T1&T2**	**1**	**Chalk and talk**
		5.2	Terms and concepts of Components	**T1&T2**	**1**	**Chalk and talk**
		5.3	Deployment	**T1&T2**	**1**	**Chalk and talk**
		5.4	Modeling techniques	**T1**	**1**	**Chalk and talk**
		5.5	Terms and concepts of Deployment	**T1&T2**	**1**	**Chalk and talk**
		5.6	Modeling techniques	**T1**	**1**	**Chalk and talk**
		5.7	Component diagrams	**T1&T2**	**1**	**Chalk and talk**
		5.8	Modeling techniques	**T1**	**1**	**Chalk and talk**
		5.9	Terms and concepts of Components diagrams	**T1&T2**	**1**	**Chalk and talk**
		5.10	Deployment diagram	**T1&T2**	**1**	**Chalk and talk**
		5.11	Terms and concepts of Deployment diagram	**T1&T2**	**1**	**Chalk and talk**
		5.12	Modeling techniques	**T1&T2**	**1**	**Chalk and talk**
		Content beyond Syllabus	PAYTM APPLICATION		**1**	**PPT**
				Total	**13**	
VI	Apply Forward engineering techniques for a given case study. (K3)	**6.1**	The Unified Library application	**T1&T2**	**1**	**PPT**
		6.2	Usecase diagram	**T1&T2**	**1**	**PPT**
		6.3	Class and object diagram	**T1&T2**	**1**	**PPT**
		6.4	**Interaction diagrams**	**T1&T2**	**1**	**PPT**
		6.5	Activity diagram	**T1&T2**	**1**	**PPT**
Content beyond Syllabus (if needed)		**6.6**	Statechart diagram	**R1**	**1**	**PPT**
Content beyond Syllabus		Content beyond Syllabus	Railway reservation system case study	**R1**	**1**	**PPT**
				Total	**7**	
				CUMULATIVE PROPOSED PERIODS	**65**	

Text Books:

S.No.	**AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION**
1	Grady Booch, James Rum Baugh, Ivar Jacobson The Unified Modeling Language User Guide,5th edition , Pearson Education 2009
2	Hans - Erik Eriksson, Magnus Penker, Brian Lyons, David Fado, UML 2 Toolkit,3rd edition , WILEY - Dream tech India Pvt. Ltd. 2006

Reference Books:	
S.No.	**AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION**
1	**D.JAYA MALA, Object Oriented Analysis and Design Using UML, Tata McGrawm-Hill Education,2013**
2	JAMES J.ODELL, Advanced Object-Oriented Analysis and Design Using UML
Web Details	
1	http://en.wikipedia.org/wiki/Software_development_process
2	http://en.wikipedia.org/wiki/Rational_Unified_Process
3	http://www.uml-diagrams.org/profile-diagrams.html
4	**https://www.tutorialspoint.com/uml/uml_building_blocks.htm**
5	**https://www.uml.org/**

		Name	Signature with Date
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iv.	Module Coordinator	N.Tulasi Raju	
v.	Programme Coordinator	Dr.P.Srinivasulu	

Principal