

(Autonomous)

Narsapur, West Godavari District, A.P. 534280

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### TEACHING PLAN

| Code         | Cour<br>Titl   |               | Semester             | Branches       | Contact<br>Periods<br>/Week | Acad                            | lemic<br>ear    | Date of commencement of Semester |
|--------------|--|---------------|----------------------|----------------|-----------------------------|---------------------------------|-----------------|----------------------------------|
| 20CS6<br>T02 | OBJECT ORIENTED<br>ANALYSIS & DESIGN                                     |               | VI                   | CSE            | 5                           | 2024                            | -2025           | 18-11-2024                       |
| COURS        | E OUTCOMES   | S             |                      |                |                             |                                 |                 |                                  |
| 1            | Identify the imp   | portance of   | modeling and         | object-orien   | ted systen                  | ns analys                       | is and des      | sign (K2)                        |
| 2            | Design the basic   | structural r  | nodeling tech        | iniques using  | building                    | blocks o                        | f UML.(K        | (3)                              |
| 3            | Apply common   | modeling te   | chniques for         | class and obj  | ect diagra                  | ms(K3)                          |                 |                                  |
| 4            | Generalize the b   | asic behavi   | oral and adva        | nced behavio   | ral model                   | ing diag                        | rams.(K2)       |                                  |
| 5            | Illustrate the cor   | mponents ar   | d deploymen          | t diagrams (I  | (4)                         |                                 |                 |                                  |
| UNIT         | со   | Topics<br>No. | Тор                  | ics/Activity   |                             | Text<br>Book /<br>Referen<br>ce | Contact<br>Hour | Deliverymethod                   |
|              | ÷  | 1.1           | Introduction         | to UML         |                             | T1                              | 1               | Chalk and tall                   |
|              | of of  | 1.2           | Importance of        | of modeling    |                             | T1                              | 1               | Chalk and talk                   |
|              | re the   | 1.3           | principles of        |                |                             | T1                              | 1               | PPT                              |
|              | Identify the importance of modeling andobject-oriented systems           | 1.4           | object orient        |                |                             | T1                              | 1               | Chalk and tall                   |
| 1            |  | 1.5           |                      | nodel of the U | JML                         | T1                              | 2               | Flipped teachin                  |
| - 1          |  | I I I I       | 1.6                  | Architecture   |                             | LENE I                          | T1              | 1                                |
| 1            | ů °  | 1.7           | Software De<br>Cycle | velopment Li   | fe                          | T1                              | 1               | Active Learning                  |
|              |  |               |                      |                |                             | Total                           | 08              |                                  |
|              | Design the basic structural modeling techniques using building blocks of | 2.1           | Classes              |                |                             | T1                              | 1               | Chalk and talk                   |
| ne           |  | 2.2           | Relationship         |                |                             | T1                              | 1               | PPT                              |
| 11 2         |  | 2.3           | Common Me            | echanisms      |                             | T1                              | 1               | Flipped teaching                 |
| 11 818       |  | 2.4           | Diagrams             |                |                             |                                 | 2               | PPT                              |
| Ã            |  | 2.5           |                      | ructural Mod   | leling:                     | T1                              | 1               | Chalk and talk                   |
|              | o [  | 2.6           | Advanced cl          |                |                             | T                               | 2               | PPT                              |
|              | ,  | 2.7           | Advanced re          | lationships    |                             | T1                              | 1               | Chalk and talk                   |

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|     | 301  |                               |   |       |    |                  |
|-----|--|-------------------------------|---|-------|----|------------------|
|     | Apply common modeling techniques for class and object diagrams(K3)             | 3.1                           | Class & Object Diagrams:<br>Introduction  | Ti    | 1  | Chalk and talk   |
| m   | ng tec<br>iagran   | 3.2                           | Terms and concepts of Class<br>Diagrams   | T1    | 2  | Chalk and talk   |
|     | nodel  | 3.3                           | modeling techniques for Class<br>Diagrams | T1    | 2  | PPT              |
|     | mon 1  | 3.4                           | Terms and concepts of Object Diagrams     | T1    | 2  | Chalk and talk   |
|     | y com  | 3.5                           | Modeling techniques for Object Diagrams.  | T1    | 2  | Flipped teaching |
|     | Appl<br>for  | Content<br>beyond<br>Syllabus | ATM application class andobject diagram   | T1    | 1  | PPT              |
|     |  |                               |   | Total | 10 |                  |
|     |  | 4.1                           | Interactions                              | T1    | 1  | Chalk and talk   |
|     | - FE   | 4.2                           | Interaction diagrams                      | T1    | 1  | Chalk and talk   |
|     | ,io  | 4.3                           | Sequence diagram                          | T1    | 1  | Chalk and talk   |
|     | hay  | 4.4                           | Collaboration diagram                     | T1    | 1  | Chalk and talk   |
|     | K joi be   | 4.5                           | Basic Behavioral Modeling - II:           | T1    | 1  | PPT              |
|     | sic<br>nav<br>ns.(   | 4.6                           | Use cases                                 | T1    | 1  | Chalk and talk   |
|     | Generalize the basic behavioral and advanced behavioral modeling diagrams.(K2) | 4.7                           | Use case Diagrams                         | T1    | 2  | Flipped teaching |
| 1   |  | 4.8                           | Activity Diagrams                         | T1    | 1  | Chalk and talk   |
| IV  |  | 4.9                           | Advanced Behavioral Modeling:<br>Events   | T1    | 1  | PPT              |
|     |  | 4.10                          | Signals                                   | T1    | 1  | Chalk and talk   |
|     |  | 4.11                          | state machines                            | T1    | 1  | Chalk and talk   |
| - 1 |  | 4.12                          | state chart diagrams                      | T1    | 1  | Chalk and talk   |
|     |  | ****                          |   |       |    |                  |



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|         |  | 5.1                | Components Terms and concepts of  | T1&T2<br>T1&T2 | _1_ | Chalk and talk   |  |
|---------|--|--------------------|---|----------------|-----|------------------|--|
| 197     | ent  | 5.2                | Components  | 11&12          | 1   | Chalk and talk   |  |
| ) i i   | Ř  | 5.3                | Deployment  | T1&T2          | 1   | Chalk and talk   |  |
|         | olog   | 5.4                | Component diagrams  | T1             | 1   | Flipped teaching |  |
|         | iq qel   | 5.5                | Modeling techniques   | T1&T2          | 1   | Chalk and talk   |  |
|         | nts ar   | 5.6                | Terms and concepts of<br>Components diagrams  | T1             | 1   | PPT              |  |
| V       | one  | 5.7                | Deployment diagram  | T1&T2          | 1   | Chalk and talk   |  |
|         | ошос   | 5.8                | Terms and concepts of<br>Deployment diagram   | T1             | 1   | Chalk and talk   |  |
|         | Illustrate the components and deployment diagrams(K3)  | 5.9                | Modeling techniques   | T1&T2          | 1   | Chalk and talk   |  |
|         | strat  | Content            |   |                |     | 7, 10            |  |
|         | Illus  | beyond<br>Syllabus | AIRLINE TICKET RESERVATION SYSTEM   |                | 1   | PPT              |  |
|         |  |                    |   | Total          | 10  |                  |  |
|         |  |                    | CUMULATIVE PROPOSED P   |                | 650 |                  |  |
| Text Bo |  |                    | NAME OF THE PARTY |                |     |                  |  |
| 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,3 <sup>rd</sup> edition, WILEY - Dream tech India Pvt. Ltd. 2006 |                    |   |                |     |                  |  |



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| Referen | ce 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 D   | tails  |  |  |  |  |  |  |
| 1       | http://en.wikipedia.org/wiki/Software development process                                    |  |  |  |  |  |  |
| 2       | http://en.wikipedia.org/wiki/Rational Unified Process  |  |  |  |  |  |  |
| 3       |  |  |  |  |  |  |  |
| 4       | https://www.tutorialspoint.com/uml/uml building blocks.htm                                   |  |  |  |  |  |  |
| 5       | https://www.uml.org/   |  |  |  |  |  |  |

|     |                       | Name                | Signature with Date |
|-----|-----------------------|---------------------|---------------------|
| i.  | Faculty I             | Dr. S Gopinath      | Leg.V               |
| ii. | Faculty II            | Mr. V S Ramakrishna | (100)               |
| iii | Faculty III           | Mr. V John Bunyan   | ToluBurn            |
| iv. | Faculty IV            | Mr. B S Vara Prasad | Cond                |
| v.  | Faculty V             | Mrs. V Srilakshmi   | Sril                |
| iv. | Course Coordinator    | Mr. M Satyanarayana |                     |
| v.  | Module Coordinator    | Mr. N Tulasi Raju   | k 1/h/6             |
| vi. | Programme Coordinator | Dr. P Srinivasulu   | m                   |

HOD

Principal