

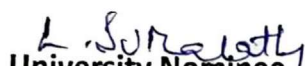
**GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
(AUTONOMOUS)**

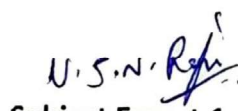
**NH-16, Chaitanya Knowledge City, Rajahmundry – 533296. E.G. Dt., - AP.**

**Approved by AICTE, Accredited by NBA & NAAC 'A+' Grade, Recognized under 2(f) and 12(b) of UGC,  
Permanently Affiliated to JNTUK, Kakinada.**



**Department of Computer Science & Engineering  
4 YEARS B.TECH COURSE  
REGULATION – GR14  
B.TECH**

  
**University Nominee  
Dr.L.Sumalatha**

  
**Subject Expert-1  
Dr.U.S.N.Raju**

  
**Industry  
Mr.B.Mahesh**

  
**BOS-CHAIRMAN  
Dr.B.Sujatha**

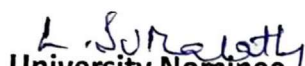
### I Year I Semester

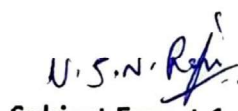
| S. No.   | Subject Title                                   | Periods per week |   |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|-------------------------------------------------|------------------|---|---|----|----------------------------------------|------|-------|
|          |                                                 | T                | P | D |    | Int.                                   | Ext. | Total |
| 14159101 | English – I                                     | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159102 | Mathematics-I                                   | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159103 | Computer Programming-1                          | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159104 | Applied Mechanics                               | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159175 | Basic Engineering Drawing                       | 1                | - | 3 | 3  | 30                                     | 70   | 100   |
| 14159191 | Professional Ethics & Human Values <sup>#</sup> | 4                | - | - | -  | -                                      | -    | S/U*  |
| 14159111 | English Communication Lab -I                    | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14159112 | Computer Programming Lab-1                      | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14159113 | Engineering Workshop & IT Workshop              |                  | 3 | - | 2  | 50                                     | 50   | 100   |
| Total    |                                                 | 21               | 9 | 3 | 21 | 300                                    | 500  | 800   |

T- THEORY    P – PRACTICAL    D- DRAWING    C – CREDITS    Int. – INTERNAL    Ext. – EXTERNAL

### I Year II Semester

| S. No.   | Subject Title                     | Periods per week |   |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|-----------------------------------|------------------|---|---|----|----------------------------------------|------|-------|
|          |                                   | T                | P | D |    | Int.                                   | Ext. | Total |
| 14159201 | English – II                      | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159202 | Mathematics-II                    | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159203 | Mathematics – III                 | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159204 | Engineering Physics               | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159205 | Advanced Computer Programming     | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159206 | Environmental Studies             | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14159211 | English Communication Lab- II     | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14159212 | Advanced Computer Programming Lab | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14159213 | Engineering Physics Lab           |                  | 3 | - | 2  | 50                                     | 50   | 100   |
| Total    |                                   | 24               | 9 | 0 | 24 | 330                                    | 570  | 900   |

  
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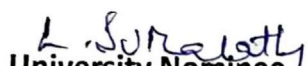
  
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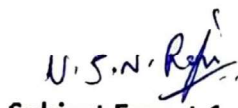
## II Year I Semester

| S. No.   | Subject Title                                | Periods per week |    |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|----------------------------------------------|------------------|----|---|----|----------------------------------------|------|-------|
|          |                                              | T                | P  | D |    | Int.                                   | Ext. | Total |
| 14159301 | Managerial Economics and Financial Analysis  | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150302 | Object Oriented Programming through C++      | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150303 | Mathematical Foundations of Computer Science | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14154304 | Digital Logic Design                         | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150305 | Data Structures                              | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150311 | Object Oriented Programming Lab              | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14150312 | Data Structures Lab                          | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14154313 | Digital Logic Design Lab                     | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14159392 | Soft Skills – 1 <sup>#</sup>                 | 3                | 1  | - | -  | -                                      | -    | -     |
| Total    |                                              | 23               | 10 | 0 | 21 | 300                                    | 500  | 800   |

## II Year II Semester

| S. No.   | Subject Title                        | Periods per week |   |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|--------------------------------------|------------------|---|---|----|----------------------------------------|------|-------|
|          |                                      | T                | P | D |    | Int.                                   | Ext. | Total |
| 14159401 | Probability and Statistics           | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14150402 | Java Programming                     | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14150403 | Advanced Data Structures             | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14150404 | Formal Languages and Automata Theory | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14150405 | Computer Organization                | 4                | - | - | 3  | 30                                     | 70   | 100   |
| 14150411 | Advanced Data Structures Lab         | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14150412 | Java Programming Lab                 | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| 14150413 | Free Open Source Software (FOSS) Lab | -                | 3 | - | 2  | 50                                     | 50   | 100   |
| Total    |                                      | 20               | 9 | 0 | 21 | 300                                    | 500  | 800   |

  
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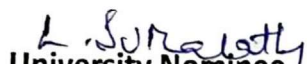
  
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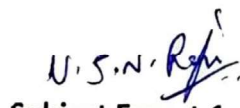
### III Year I Semester

| S. No    | Subject Title                       | Periods per week |    |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|-------------------------------------|------------------|----|---|----|----------------------------------------|------|-------|
|          |                                     | T                | P  | D |    | Int.                                   | Ext. | Total |
| 14150501 | Compiler Design                     | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150502 | Data Communication                  | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150503 | Principles of Programming Languages | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150504 | Database Management Systems         | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150505 | Operating Systems                   | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150511 | Compiler Design Lab                 | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14150512 | Operating Systems Lab               | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14150513 | Database Management Systems Lab     | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14159596 | Soft Skills-II <sup>#</sup>         | 3                | 1  | - | -  | -                                      | -    | -     |
| 14150521 | Mini project/Study Project          | -                | -  | - | 2  | 100                                    | -    | 100   |
| Total    |                                     | 23               | 10 | 0 | 23 | 400                                    | 500  | 900   |

### III Year II Semester

| S. No.   | Subject Title                               | Periods per week |    |   | C  | Scheme of Examination<br>Maximum Marks |      |       |
|----------|---------------------------------------------|------------------|----|---|----|----------------------------------------|------|-------|
|          |                                             | T                | P  | D |    | Int.                                   | Ext. | Total |
| 14150601 | Computer Networks                           | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150602 | Data Warehousing and Mining                 | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150603 | Design and Analysis of Algorithms           | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150604 | Software Engineering                        | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150605 | Web Technologies                            | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150606 | Multimedia Computing                        | 4                | -  | - | 3  | 30                                     | 70   | 100   |
| 14150611 | Computer Networks & Network Programming lab | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14150612 | Web Technologies Lab                        | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| 14150613 | Linux Programming Lab                       | -                | 3  | - | 2  | 50                                     | 50   | 100   |
| Total    |                                             | 24               | 12 | 0 | 24 | 330                                    | 570  | 900   |

  
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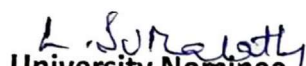
### IV Year I Semester

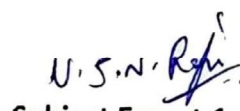
| S. No.       | Subject Title                     | Periods per week |   |   | C  | Scheme of Examination Maximum Marks |      |       |
|--------------|-----------------------------------|------------------|---|---|----|-------------------------------------|------|-------|
|              |                                   | T                | P | D |    | Int.                                | Ext. | Total |
| 14150701     | Cryptography and Network Security | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150702     | UML & Design Patterns             | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150703     | Mobile Computing                  | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150704     | Software Project Management       | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150761 a-e | Elective – I                      | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150762 a-e | Elective – II                     | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150711     | UML & Design Patterns Lab         | -                | 3 | - | 2  | 50                                  | 50   | 100   |
| 14150712     | Network Security Lab              | -                | 3 | - | 2  | 50                                  | 50   | 100   |
| 14150795     | IPR & Patents                     | 4                | - | - | -  | -                                   | -    | -     |
| 14150731     | Summer Internship / Training      | -                | - | - | 2  | 100                                 | -    | 100   |
| Total        |                                   | 28               | 6 | 0 | 24 | 380                                 | 520  | 900   |

### IV Year II Semester

| S. No.       | Subject Title       | Periods per week |   |   | C  | Scheme of Examination Maximum Marks |      |       |
|--------------|---------------------|------------------|---|---|----|-------------------------------------|------|-------|
|              |                     | T                | P | D |    | Int.                                | Ext. | Total |
| 14150804     | Distributed Systems | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14159801     | Management Science  | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150862 a-e | Elective – III      | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150863 a-e | Elective – IV       | 4                | - | - | 3  | 30                                  | 70   | 100   |
| 14150841     | Project             | -                | - | - | 9  | 60                                  | 140  | 200   |
| Total        |                     | 16               | 0 | 0 | 21 | 180                                 | 420  | 600   |

# add on courses

  
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# **LIST OF ELECTIVES**

## **Elective-I**

- 14150761-a) Software Testing Methodologies
- 14150761-b) Simulation Modeling.
- 14150761-c) Information Retrieval Systems
- 14150761-d) Artificial Intelligence.
- 14150761-e) High Performance Computing

## **Elective-II**

- 14150762-a) Digital Forensics
- 14150762-b) Hadoop and Big Data
- 14150762-c).Net programming
- 14150762-d) Machine Learning
- 14150762-e) Advanced Databases

## **Elective-III**

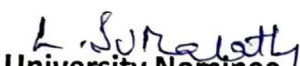
- 14150862-a) Human Computer Interaction
- 14150862-b) Advanced Operating Systems
- 14150862-c) Mobile Adhoc & Sensor Networks
- 14150862-d) Pattern Recognition
- 14150862-e) Digital Image Processing

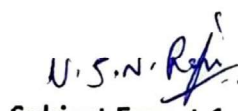
## **Elective-IV**

- 14150863-a) Embedded and Real Time Systems
- 14150863-b) Neural Networks & Soft Computing
- 14150863-c) Social Networks and the Semantic Web
- 14150863-d) Parallel Computing
- 14150863-e) E-Commerce

## **MOOCS**

- a) Data Warehousing and Mining
- b) Design and Analysis of Algorithms
- c) Web Technologies

  
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