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Kakinada.

**DEPARTMENT OF CIVIL ENGINEERING**

**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**

**I YEAR I SEMESTER**

| S. No.       | Course Code | Course Type | Course Title                                   | Periods per week |          |           | C         | Scheme of Examination<br>Maximum Marks |            |            |
|--------------|-------------|-------------|--|------------------|----------|-----------|-----------|--|------------|------------|
|              |             |             |  | L                | T        | P         |           | Int.                                   | Ext.       | Total      |
| 1            |             | BSC         | Mathematics-I                                  | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 2            |             | HSMC        | Communicative English I                        | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 3            |             | BSC         | Engineering Chemistry                          | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 4            |             | ESC         | Basic Electrical & Electronics Engineering     | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 5            |             | ESC         | Engineering Graphics                           | 1                | 0        | 3         | 2.5       | 30                                     | 70         | 100        |
| 6            |             | MC          | Professional Ethics & Human Values             | 2                | 0        | 0         | 0         | 30*                                    | -          | -          |
| 7            |             | HSMC        | Communicative English Laboratory-I             | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| 8            |             | BSC         | Engineering Chemistry Laboratory               | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| 9            |             | ESC         | Basic Electrical & Electronics Engineering Lab | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| <b>TOTAL</b> |             |             |  | <b>15</b>        | <b>0</b> | <b>12</b> | <b>19</b> | <b>300</b>                             | <b>500</b> | <b>800</b> |
| BSC = 7.5    |             | ESC=7       | HSMC=4.5                                       | MC=0             |          |           |           |  |            |            |

University Nominee  
(Dr. G.V.R. Prasada Raju)

Subject Expert  
(Dr. D. Rama Seshu)

Industry Expert  
(Sri.S.V.Vijaykumar)

Industry Expert  
(Sri. B.P. Ranga Rao)

Internal Member  
(Sri. S.N.Rao)

Internal Member  
(Mr. K. Gopal Sankar)

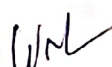
Chairman-BOS  
(Dr.D.Venkateswarlu)

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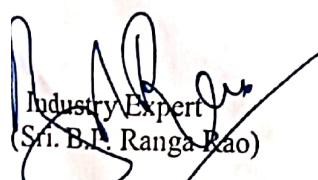
**DEPARTMENT OF CIVIL ENGINEERING**
**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**
**I YEAR II SEMESTER**

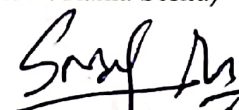
| S. No.       | Course Code | Course Type | Course Title  | Periods per week |          |           | C         | Scheme of Examination<br>Maximum Marks |            |            |
|--------------|-------------|-------------|---|------------------|----------|-----------|-----------|--|------------|------------|
|              |             |             |   | L                | T        | P         |           | Int.                                   | Ext.       | Total      |
| 1            |             | BSC         | Mathematics-II                                      | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 2            |             | HSMC        | Communicative English-II                            | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 3            |             | ESC         | Engineering Mechanics                               | 2                | 1        | 0         | 3         | 30                                     | 70         | 100        |
| 4            |             | ESC         | Problem Solving & Programming in C                  | 2                | 1        | 0         | 3         | 30                                     | 70         | 100        |
| 5            |             | BSC         | Engineering Physics and its Applications            | 3                | 0        | 0         | 3         | 30                                     | 70         | 100        |
| 6            |             | MC          | Environmental Studies                               | 2                | 0        | 0         | 0         | 30*                                    | -          | -          |
| 7            |             | HSMC        | Communicative English Laboratory -II                | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| 8            |             | ESC         | Basic Engineering Workshop                          | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| 9            |             | BSC         | Engineering Physics and its applications Laboratory | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| 10           |             | ESC         | Problem Solving & Programming Laboratory in C       | 0                | 0        | 3         | 1.5       | 50                                     | 50         | 100        |
| <b>TOTAL</b> |             |             |   | <b>15</b>        | <b>2</b> | <b>12</b> | <b>21</b> | <b>350</b>                             | <b>550</b> | <b>900</b> |
| BSC=7.5      |             | ESC=9       | HSMC=4.5  | MC=0             |          |           |           |  |            |            |

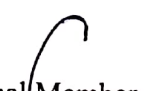
  
University Nominee  
(Dr. G.V.R. Prasada Raju)

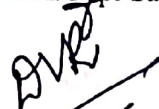
  
Subject Expert  
(Dr. D. Rama Seshu)

  
Industry Expert  
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Chairman-BOS  
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
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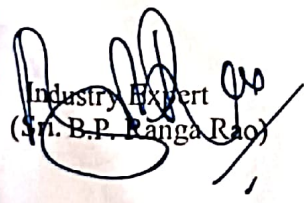
**DEPARTMENT OF CIVIL ENGINEERING**
**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**
**II YEAR I SEMESTER**

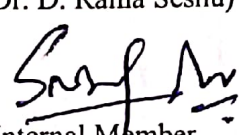
| S. No.                                   | Course Code | Course Type | Course Title                                   | Periods per week |          |          | C           | Scheme of Examination<br>Maximum Marks |            |            |
|--|-------------|-------------|--|------------------|----------|----------|-------------|--|------------|------------|
|  |             |             |  | L                | T        | P        |             | Int.                                   | Ext.       | Total      |
| 1  |             | BSC         | Mathematics-III                                | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 2  |             | ESC         | Strength of Materials                          | 2                | 1        | 0        | 3           | 30                                     | 70         | 100        |
| 3  |             | PCC         | Environmental Engineering                      | 2                | 0        | 0        | 2           | 30                                     | 70         | 100        |
| 4  |             | PCC         | Construction Materials, Equipment & Management | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 5  |             | PCC         | Surveying & Geomatics                          | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 6  |             | ESC         | Fluid Mechanics                                | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 7  |             | MC          | Constitution of India                          | 2                | 0        | 0        | 0           | 30*                                    | —          | —          |
| 8  |             | ESC         | Building planning and Drawing Lab              | 0                | 0        | 3        | 1.5         | 50                                     | 50         | 100        |
| 9  |             | PCC         | Materials Testing Laboratory                   | 0                | 0        | 3        | 1.5         | 50                                     | 50         | 100        |
| 10                                       |             | PCC         | Surveying Field Work                           | 0                | 0        | 3        | 1.5         | 50                                     | 50         | 100        |
| <b>TOTAL</b>                             |             |             |  | <b>18</b>        | <b>1</b> | <b>9</b> | <b>21.5</b> | <b>330</b>                             | <b>570</b> | <b>900</b> |
| BSC = 3    ESC = 7.5    PCC = 11    MC=0 |             |             |  |                  |          |          |             |  |            |            |

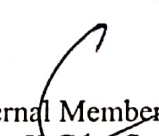
  
 University Nominee  
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## DEPARTMENT OF CIVIL ENGINEERING

4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19

## II YEAR II SEMESTER

| S. No.  | Course Code | Course Type | Subject Title                                    | Periods per week |   |   | C    | Scheme of Examination Maximum Marks |      |       |
|---|-------------|-------------|--|------------------|---|---|------|-------------------------------------|------|-------|
|   |             |             |  | L                | T | P |      | Int.                                | Ext. | Total |
| 1   |             | BSC         | Numerical Methods and Probability & Statistics   | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 2   |             | OEC         | Open Elective -I                                 | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 3   |             | PCC         | Mechanics of materials                           | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 4   |             | PCC         | Hydraulics and Hydraulic Machinery               | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 5   |             | PCC         | Structural Analysis                              | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 6   |             | PEC         | Professional Elective - I                        | 3                | 0 | 0 | 3    | 30                                  | 70   | 100   |
| 7   |             | PCC         | Fluid Mechanics & Hydraulic Machinery Laboratory | 0                | 0 | 3 | 1.5  | 50                                  | 50   | 100   |
| 8   |             | PCC         | Environmental Engineering Laboratory             | 0                | 0 | 3 | 1.5  | 50                                  | 50   | 100   |
| 9   |             | PR          | Community Service Oriented Project               | 0                | 0 | 1 | 0.5  | 100                                 | -    | 100   |
| TOTAL   |             |             |  | 18               | 0 | 7 | 21.5 | 380                                 | 520  | 900   |
| BSC = 3    PCC = 12    OEC = 3    PEC = 3    PR = 0.5 |             |             |  |                  |   |   |      |                                     |      |       |

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**DEPARTMENT OF CIVIL ENGINEERING**
**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**
**III YEAR I SEMESTER**

| S. No.   | Course Code | Course Type | Course Title                             | Periods per week |          |          | C           | Scheme of Examination<br>Maximum Marks |            |            |
|--|-------------|-------------|--|------------------|----------|----------|-------------|--|------------|------------|
|  |             |             |  | L                | T        | P        |             | Int.                                   | Ext.       | Total      |
| 1  |             | PCC         | Theory of Structures                     | 2                | 1        | 0        | 3           | 30                                     | 70         | 100        |
| 2  |             | PCC         | Design of Reinforced Concrete Structures | 2                | 1        | 0        | 3           | 30                                     | 70         | 100        |
| 3  |             | PCC         | Soil Mechanics                           | 2                | 1        | 0        | 3           | 30                                     | 70         | 100        |
| 4  |             | ESC         | Engineering Geology                      | 2                | 0        | 0        | 2           | 30                                     | 70         | 100        |
| 5  |             | PCC         | Engineering Hydrology                    | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 6  |             | PEC         | Professional Elective -II                | 3                | 0        | 0        | 3           | 30                                     | 70         | 100        |
| 7  |             | MC          | Intellectual Property Rights and Patents | 2                | 0        | 0        | 0           | 30*                                    | ---        | ---        |
| 8  |             | PCC         | Soil Mechanics Laboratory                | 0                | 0        | 3        | 1.5         | 50                                     | 50         | 100        |
| 9  |             | ESC         | Engineering Geology Lab                  | 0                | 0        | 2        | 1           | 50                                     | 50         | 100        |
| 10   |             | PR          | Mini Project-1/Study Project/Internship  | 0                | 0        | 0        | 2           | 100                                    | -          | 100        |
| <b>TOTAL</b>                                     |             |             |  | <b>16</b>        | <b>3</b> | <b>5</b> | <b>21.5</b> | <b>380</b>                             | <b>520</b> | <b>900</b> |
| PEC = 3    PCC = 13.5    PR = 2    ESC=3    MC=0 |             |             |  |                  |          |          |             |  |            |            |

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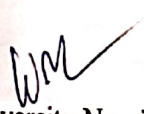
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**DEPARTMENT OF CIVIL ENGINEERING**

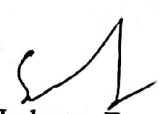
4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19


**III YEAR II SEMESTER**

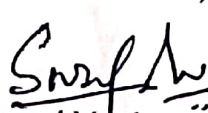
| S. No.                            | Course Code | Course Type | Course Title  | Periods per week |          |          | C           | Scheme of Examination Maximum Marks |            |            |
|-----------------------------------|-------------|-------------|---|------------------|----------|----------|-------------|-------------------------------------|------------|------------|
|                                   |             |             |   | L                | T        | P        |             | Int.                                | Ext.       | Total      |
| 1                                 |             | OEC         | Open Elective-II  | 3                | 0        | 0        | 3           | 30                                  | 70         | 100        |
| 2                                 |             | PCC         | Design of Steel Structures                                  | 2                | 1        | 0        | 3           | 30                                  | 70         | 100        |
| 3                                 |             | PCC         | Foundation Engineering                                      | 2                | 1        | 0        | 3           | 30                                  | 70         | 100        |
| 4                                 |             | PCC         | Transportation Engineering                                  | 3                | 0        | 0        | 3           | 30                                  | 70         | 100        |
| 5                                 |             | PCC         | Irrigation Engineering                                      | 3                | 0        | 0        | 3           | 30                                  | 70         | 100        |
| 6                                 |             | PCC         | Concrete Technology ✓                                       | 2                | 1        | 0        | 3           | 30                                  | 70         | 100        |
| 7                                 |             | HSMC        | Soft Skills   | 0                | 0        | 3        | 1.5         | 50                                  | 50         | 100        |
| 8                                 |             | PCC         | Software applications in Civil Engineering                  | 0                | 0        | 3        | 1.5         | 50                                  | 50         | 100        |
| 9                                 |             | PCC         | Concrete Technology & Transportation Engineering Laboratory | 0                | 0        | 3        | 1.5         | 50                                  | 50         | 100        |
| <b>TOTAL</b>                      |             |             |   | <b>15</b>        | <b>3</b> | <b>9</b> | <b>22.5</b> | <b>330</b>                          | <b>570</b> | <b>900</b> |
| HSMC = 1.5    PCC = 18    OEC = 3 |             |             |   |                  |          |          |             |                                     |            |            |

  
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**DEPARTMENT OF CIVIL ENGINEERING**
**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**
**IV YEAR I SEMESTER**

| S. No.  | Course Code | Course Type | Course Title                                   | Periods per week |          |          | C         | Scheme of Examination Maximum Marks |            |            |
|---|-------------|-------------|--|------------------|----------|----------|-----------|-------------------------------------|------------|------------|
|   |             |             |  | L                | T        | P        |           | Int.                                | Ext.       | Total      |
| 1   |             | OEC         | Open Elective-III                              | 3                | 0        | 0        | 3         | 30                                  | 70         | 100        |
| 2   |             | OEC         | Open Elective-IV                               | 3                | 0        | 0        | 3         | 30                                  | 70         | 100        |
| 3   |             | PCC         | Pre stressed Concrete                          | 2                | 1        | 0        | 3         | 30                                  | 70         | 100        |
| 4   |             | PEC         | Professional Elective-III                      | 3                | 0        | 0        | 3         | 30                                  | 70         | 100        |
| 5   |             | PEC         | Professional Elective-IV                       | 3                | 0        | 0        | 3         | 30                                  | 70         | 100        |
| 6   |             | MC          | Design Thinking & Product Innovation           | 2                | 0        | 0        | 0         | 30*                                 | -          | -          |
| 7   |             | PCC         | Infrastructure Design and Detailing Laboratory | 0                | 0        | 2        | 1         | 50                                  | 50         | 100        |
| 8   |             | PR          | Mini Project -2 / Internship                   | 0                | 0        | 0        | 2         | 100                                 | -          | 100        |
| <b>TOTAL</b>                                      |             |             |  | <b>16</b>        | <b>1</b> | <b>2</b> | <b>18</b> | <b>300</b>                          | <b>400</b> | <b>700</b> |
| PEC = 6    MC = 0    PCC = 4    OEC = 6    PR = 2 |             |             |  |                  |          |          |           |                                     |            |            |

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**DEPARTMENT OF CIVIL ENGINEERING**


**4 Years B.Tech. (Civil Engineering) Course Structure : GRBT-19**

**IV YEAR II SEMESTER**

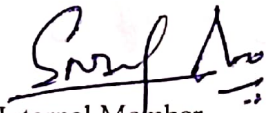
| S. No.       | Course Code | Course Type | Course Title                           | Periods per week |          |           | C         | Scheme of Examination Maximum Marks |            |            |
|--------------|-------------|-------------|--|------------------|----------|-----------|-----------|-------------------------------------|------------|------------|
|              |             |             |  | L                | T        | P         |           | Int.                                | Ext.       | Total      |
| 1            |             | PCC         | Estimating, Specifications & Contracts | 3                | 0        | 0         | 3         | 30                                  | 70         | 100        |
| 2            |             | PEC         | Professional Elective-V                | 3                | 0        | 0         | 3         | 30                                  | 70         | 100        |
| 3            |             | PR          | Project                                | 0                | 0        | 18        | 9         | 80                                  | 120        | 200        |
| <b>TOTAL</b> |             |             |  | <b>6</b>         | <b>0</b> | <b>18</b> | <b>15</b> | <b>140</b>                          | <b>260</b> | <b>400</b> |
| PEC = 3      | PCC = 3     | PR = 9      |  |                  |          |           |           |                                     |            |            |

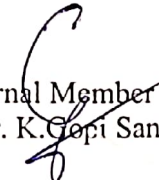
  
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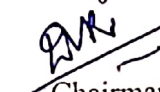
  
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