

## B.Tech Computer Science and Engineering - Curriculum

### Semester - I

| S.No | Course No | Course Name   | L-T-P-C* |
|------|-----------|---|----------|
| 1    | CS1100    | Computational Engineering ( <a href="#">Syllabus</a> )              | 2-0-3-4  |
| 2    | CY1010    | Chemistry – I (Physical & Theoretical) ( <a href="#">Syllabus</a> ) | 2-1-0-3  |
| 3    | ID1100    | Concepts in Engineering & Design ( <a href="#">Syllabus</a> )       | 3-0-0-3  |
| 4    | MA1010    | Mathematics-I ( <a href="#">Syllabus</a> )                          | 3-1-0-4  |
| 5    | ME1120    | Engineering Drawing ( <a href="#">Syllabus</a> )                    | 0-0-3-3  |
| 6    | PH1010    | Physics-I ( <a href="#">Syllabus</a> )                              | 2-1-0-3  |
| 7    | PH1030    | Physics Lab-I   | 0-0-3-2  |
| 8    | WS1010    | Workshop-I ( <a href="#">Syllabus</a> )                             | 0-0-3-2  |

### Semester - II

| S.No | Course No | Course Name   | L-T-P-C* |
|------|-----------|---|----------|
| 1    | AM1100    | Engineering Mechanics ( <a href="#">Syllabus</a> )                | 3-1-0-4  |
| 2    | CY1020    | Chemistry – II (Organic & Inorganic) ( <a href="#">Syllabus</a> ) | 2-1-0-3  |
| 3    | CY1030    | Chemistry Lab – I ( <a href="#">Syllabus</a> )                    | 0-0-3-2  |
| 4    | GN1100    | Life skills   | 2-0-0-2  |
| 5    | ID1200    | Ecology and Environment   | 2-0-0-2  |
| 6    | MA1020    | Mathematics-II ( <a href="#">Syllabus</a> )                       | 3-1-0-4  |
| 7    | ME1100    | Thermodynamics ( <a href="#">Syllabus</a> )                       | 2-1-0-3  |
| 8    | PH1020    | Physics – II ( <a href="#">Syllabus</a> )                         | 2-1-0-3  |
| 9    | WS1020    | Workshop – II   | 0-0-3-2  |

### Semester - III

| S.No | Course No | Course Name   | L-T-P-C* |
|------|-----------|---|----------|
| 1    | CS2100    | Discrete Mathematics for Computer Science                 | 3-0-0-3  |
| 2    | CS2110    | Computer Programming Lab                                  | 0-0-3-2  |
| 3    | EE2001    | Digital Systems ( <a href="#">Syllabus</a> )              | 3-1-0-4  |
| 4    | EE2702    | Digital Circuits Lab ( <a href="#">Syllabus</a> )         | 0-0-3-2  |
| 5    | EE100     | Basic Electrical Engineering ( <a href="#">Syllabus</a> ) | 3-0-0-3  |
| 6    | BT1010    | Life Sciences   | 2-0-0-2  |
| 7    | MAE1      | Mathematics Elective 1 ( <a href="#">Syllabus</a> )       | 3-0-0-3  |
| 8    | HSE1      | Humanities Elective 1                                     | 3-0-0-3  |

### Semester - IV

| S.No | Course No | Course Name                       | L-T-P-C* |
|------|-----------|-----------------------------------|----------|
| 1    | CS2200    | Language Machine and Computations | 3-0-0-3  |
| 2    | CS2600    | Computer Organization             | 3-0-0-3  |
| 3    | CS2610    | Assembly Language Programming Lab | 0-0-3-2  |
| 4    | CS2800    | Data structures and Algorithms    | 3-1-0-4  |
| 5    | CS2810    | Advanced Programming Lab          | 0-0-3-2  |
| 6    | CS3100    | Paradigms of Programming          | 3-1-0-4  |
| 7    | MAE2      | Mathematics Electives-2           | 3-0-0-3  |
| 8    | HSE2      | Humanities Electives-2            | 3-0-0-3  |

**SEMESTER V**

| No     | Title                            | Credit |
|--------|----------------------------------|--------|
| CS3400 | Principles of Software Engg.     | 3      |
| CS3300 | Language Translators             | 3      |
| CS3310 | Language Translators Lab         | 2      |
| CS3500 | Operating Systems                | 3      |
| CS3510 | Operating Systems Lab            | 2      |
| CS3700 | Introduction to Database Systems | 4      |
| DPE1   | Department Elective 1            | 4      |
| MNS1   | Minor Elective 1                 | 3      |
|        | TOTAL                            | 25     |

**SEMESTER VI**

| No     | Title                        | Credit |
|--------|------------------------------|--------|
| CS3200 | Computer Networks            | 3      |
| CS3210 | Computer Networks Lab        | 2      |
| CS3400 | Principles of Software Engg. | 3      |
| CS3410 | Software Engg Lab            | 2      |
| CS3660 | Industrial Training          | 2      |
| DPE2   | Department Elective 2        | 4      |
| FRE1   | Free Elective 1              | 3      |
| MNS2   | Minor Elective 2             | 3      |
| SSE1   | Self Study Elective 1        | 4      |
|        | TOTAL                        | 26     |

**SEMESTER VII**

| No     | Title                      | Credit |
|--------|----------------------------|--------|
| CS4100 | Computer System Design     | 3      |
| CS4110 | Computer System Design Lab | 2      |
| DPE4   | Department Elective 4      | 4      |
| DPE5   | Department Elective 5      | 4      |
| DPE6   | Department Elective 6      | 4      |
| FRE2   | Free Elective 2            | 3      |
| HSE4   | Humanities Elective 4      | 3      |
| MNS3   | Minor Elective 3           | 3      |
|        | TOTAL                      | 26     |

**SEMESTER VIII**

| No     | Title               | Credit |
|--------|---------------------|--------|
| CS4800 | Project             | 8      |
| CS4880 | Industrial Lecture  | 1      |
| HS3050 | Professional Ethics | 2      |
|        | TOTAL               | 11     |