

| <b>I YEAR I SEMESTER</b> |                 |  |          |          |          |             |            |            |
|--------------------------|-----------------|--|----------|----------|----------|-------------|------------|------------|
| <b>S.No</b>              | <b>Category</b> | <b>Subjects</b>                                    | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>    | <b>I</b>   | <b>E</b>   |
| 1                        | BS              | Mathematics-I                                      | 3        | 0        | 0        | 3           | 30         | 70         |
| 2                        | BS              | Applied Chemistry                                  | 3        | 0        | 0        | 3           | 30         | 70         |
| 3                        | H&S             | Communicative English                              | 3        | 0        | 0        | 3           | 30         | 70         |
| 4                        | ESC             | Computational Thinking and Programming             | 3        | 0        | 0        | 3           | 30         | 70         |
| 5                        | ESC             | Elements of Electrical and Electronics Engineering | 3        | 0        | 0        | 3           | 30         | 70         |
| 6                        | BS Lab          | Applied Chemistry Lab                              | 0        | 0        | 3        | 1.5         | 15         | 35         |
| 7                        | ESC Lab         | Computational Thinking and Programming Lab         | 0        | 0        | 3        | 1.5         | 15         | 35         |
| 8                        | H & S Lab       | English Communication Skills Lab                   | 0        | 0        | 3        | 1.5         | 15         | 35         |
| <b>Total Credits</b>     |                 |  |          |          |          | <b>19.5</b> | <b>195</b> | <b>455</b> |
| <b>Total Marks</b>       |                 |  |          |          |          |             | <b>650</b> |            |

| <b>I YEAR II SEMESTER</b> |                 |                                     |          |          |          |             |            |            |
|---------------------------|-----------------|-------------------------------------|----------|----------|----------|-------------|------------|------------|
| <b>S.No</b>               | <b>Category</b> | <b>Subjects</b>                     | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>    | <b>I</b>   | <b>E</b>   |
| 1                         | BS              | Mathematics –II                     | 3        | 0        | 0        | 3           | 30         | 70         |
| 2                         | BS              | Applied Physics                     | 3        | 0        | 0        | 3           | 30         | 70         |
| 3                         | ESC             | Digital Logic Design                | 3        | 0        | 0        | 3           | 30         | 70         |
| 4                         | ESC             | Programming for Problem Solving     | 3        | 0        | 0        | 3           | 30         | 70         |
| 5                         | ESC             | Computer Engineering Workshop       | 1        | 0        | 4        | 3           | 15         | 35         |
| 6                         | BS Lab          | Applied Physics Lab                 | 0        | 0        | 3        | 1.5         | 15         | 35         |
| 7                         | ESC Lab         | Advanced Python Programming Lab     | 0        | 0        | 3        | 1.5         | 15         | 35         |
| 8                         | ESC Lab         | Programming for Problem Solving Lab | 0        | 0        | 3        | 1.5         | 15         | 35         |
|                           |                 | Constitution of India               | 2        | 0        | 0        | 0           | 0          | 0          |
| <b>Total Credits</b>      |                 |                                     |          |          |          | <b>19.5</b> | <b>195</b> | <b>455</b> |
| <b>Total Marks</b>        |                 |                                     |          |          |          |             | <b>650</b> |            |

| II YEAR I SEMESTER   |          |  |   |   |   |             |            |            |
|----------------------|----------|--|---|---|---|-------------|------------|------------|
| S.No                 | Category | Subjects   | L | T | P | C           | I          | E          |
| 1                    | BS / PC  | Discrete Mathematical Structures   | 3 | 0 | 0 | 3           | 30         | 70         |
| 2                    | PC       | Data Structures  | 3 | 0 | 0 | 3           | 30         | 70         |
| 3                    | PC       | Database Management Systems  | 3 | 0 | 0 | 3           | 30         | 70         |
| 4                    | ESC      | Object Oriented Programming through Java   | 3 | 0 | 0 | 3           | 30         | 70         |
| 5                    | PC       | Computer Organization  | 3 | 0 | 0 | 3           | 30         | 70         |
| 6                    | PC Lab   | Data Structures Lab  | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 7                    | PC Lab   | Database Management Systems Lab  | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 8                    | PC Lab   | Object Oriented Programming through Java Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 9                    | SO       | Skill Oriented Course – I<br>1) Animations – 2D Animation<br>2) Web Application Development Using Full Stack<br>– Module - I | 0 | 0 | 4 | 2           | --         | 50         |
| 10                   | MC       | Environmental Science  | 2 | 0 | 0 | 0           |            |            |
| <b>Total Credits</b> |          |  |   |   |   | <b>21.5</b> | <b>195</b> | <b>505</b> |
| <b>Total Marks</b>   |          |  |   |   |   |             | <b>700</b> |            |

| II YEAR II SEMESTER  |          |  |   |   |   |             |            |            |
|----------------------|----------|--|---|---|---|-------------|------------|------------|
| S.No                 | Category | Subjects   | L | T | P | C           | I          | E          |
| 1                    | BS       | Probability & Statistics   | 3 | 0 | 0 | 3           | 30         | 70         |
| 2                    | PC       | Fundamentals of Machine Learning   | 3 | 0 | 0 | 3           | 30         | 70         |
| 3                    | PC       | Operating Systems  | 3 | 0 | 0 | 3           | 30         | 70         |
| 4                    | PC       | Software Engineering   | 3 | 0 | 0 | 3           | 30         | 70         |
| 5                    | HS       | Universal Human Values   | 3 | 0 | 0 | 3           | 30         | 70         |
| 6                    | PC Lab   | Operating Systems Lab  | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 7                    | PC Lab   | UML Lab  | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 8                    | PC Lab   | Fundamentals of Machine Learning Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 9                    | SO       | Skill Oriented Course – II<br>1) Animations – 3D Animation<br>2) Web Application Development Using Full Stack<br>– Module - II | 0 | 0 | 4 | 2           | --         | 50         |
| 10                   | MC       | Critical Reading & Creative Writing  | 2 | 0 | 0 | 0           |            |            |
| <b>Total Credits</b> |          |  |   |   |   | <b>21.5</b> | <b>195</b> | <b>505</b> |
| <b>Total Marks</b>   |          |  |   |   |   |             | <b>700</b> |            |

| III YEAR I SEMESTER  |                |  |   |   |   |             |            |            |
|----------------------|----------------|--|---|---|---|-------------|------------|------------|
| S.No                 | Category       | Subjects   | L | T | P | C           | I          | E          |
| 1                    | PC             | Design and Analysis of Algorithms  | 3 | 0 | 0 | 3           | 30         | 70         |
| 2                    | PC             | Computer Networks  | 3 | 0 | 0 | 3           | 30         | 70         |
| 3                    | PC             | Compiler Design  | 3 | 0 | 0 | 3           | 30         | 70         |
| 4                    | OE / JE        | Web Technologies   | 3 | 0 | 0 | 3           | 30         | 70         |
| 5                    | PE-1           | 1. Computer Graphics<br>2. Software Testing Methodologies<br>3. Multimedia and Application Development<br>4. Network Programming | 3 | 0 | 0 | 3           | 30         | 70         |
| 6                    | PC Lab         | Web Technologies Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 7                    | PC Lab         | Computer Networks & Compiler Design Lab  | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 8                    | SAC/Soft Skill | Quantitative Aptitude & Logical Reasoning  | 0 | 0 | 4 | 2           | --         | 50         |
| 9                    | MC             | Employability Skills - I (Competitive Coding)  | 2 | 0 | 0 | 0           |            |            |
| 10                   | Internship     |  | 0 | 0 | 0 | 1.5         |            |            |
| <b>Total Credits</b> |                |  |   |   |   | <b>21.5</b> | <b>195</b> | <b>505</b> |
| <b>Total Marks</b>   |                |  |   |   |   |             | <b>700</b> |            |

| III YEAR II SEMESTER |                |  |   |   |   |             |            |            |
|----------------------|----------------|--|---|---|---|-------------|------------|------------|
| S.No                 | Category       | Subjects   | L | T | P | C           | I          | E          |
| 1                    | PC             | Data Warehousing and Data Mining   | 3 | 0 | 0 | 3           | 30         | 70         |
| 2                    | PC             | Cryptography and Network Security  | 3 | 0 | 0 | 3           | 30         | 70         |
| 3                    | PC             | Internet of Things   | 3 | 0 | 0 | 3           | 30         | 70         |
| 4                    | PE-2           | 1. Human Computer Interaction<br>2. Software Project Management<br>3. Devops<br>4. Distributed Systems | 3 | 0 | 0 | 3           | 30         | 70         |
| 5                    | OE / JE        | NoSQL Database   | 3 | 0 | 0 | 3           | 30         | 70         |
| 6                    | PC Lab         | Data Warehousing Data Mining Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 7                    | PC Lab         | Internet of Things Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 8                    | PC Lab         | NoSQL Database Lab   | 0 | 0 | 3 | 1.5         | 15         | 35         |
| 9                    | SAC/Soft Skill | Advanced English Communication Skills Lab  | 0 | 0 | 4 | 2           | --         | 50         |
| 10                   | MC             | Employability Skills - II  | 2 | 0 | 0 | 0           |            |            |
| <b>Total Credits</b> |                |  |   |   |   | <b>21.5</b> | <b>195</b> | <b>505</b> |
| <b>Total Marks</b>   |                |  |   |   |   |             | <b>700</b> |            |

| IV YEAR I SEMESTER   |                             |   |   |   |   |           |            |            |
|----------------------|-----------------------------|---|---|---|---|-----------|------------|------------|
| S.No                 | Category                    | Subjects  | L | T | P | C         | I          | E          |
| 1                    | PE                          | AR & VR / Game Development/ Soft Computing/<br>Ecommerce            | 3 | 0 | 0 | 3         | 30         | 70         |
| 2                    | PE                          | UML & DP / Agile Methodologies / Software<br>Architecture / AI & NN | 3 | 0 | 0 | 3         | 30         | 70         |
| 3                    | PE                          | BDA / Recommended Systems/ SW & SN / IRS                            | 3 | 0 | 0 | 3         | 30         | 70         |
| 4                    | OE / JE                     | Robotic Process Automation  | 3 | 0 | 0 | 3         | 30         | 70         |
| 5                    | OE                          | Open Electives offered by other departments                         | 3 | 0 | 0 | 3         | 30         | 70         |
| 6                    | HS                          | HS Elective   | 3 | 0 | 0 | 3         | 30         | 70         |
| 8                    | Skill<br>Advanced<br>Course | Skill Advanced Course   | 0 | 0 | 4 | 2         | --         | 50         |
| 9                    | PR                          | Internship  | 0 | 0 | 0 | 3         |            | 100        |
| <b>Total Credits</b> |                             |   |   |   |   | <b>23</b> | <b>180</b> | <b>570</b> |
| <b>Total Marks</b>   |                             |   |   |   |   |           | <b>750</b> |            |

| IV YEAR II SEMESTER  |          |   |   |   |   |             |   |   |
|----------------------|----------|---|---|---|---|-------------|---|---|
| S.No                 | Category | Subjects                                | L | T | P | C           | I | E |
| 1                    | Project  | Major Project Work, Seminar, Internship | - | - | - | 12          |   |   |
| <b>Total Credits</b> |          |   |   |   |   | <b>21.5</b> |   |   |
| <b>Total Marks</b>   |          |   |   |   |   |             |   |   |