

## ANNEXURE B

### CSE course structure from academic year 2023 and onwards

1st Sem	2nd Sem
<ol style="list-style-type: none"> <li>1. Engg Foundation-I (Computer Programming) (L-T-P: 3-0-2)</li> <li>2. Engg Mathematics-I (Calculus and Transform) (L-T-P: 3-1-0)</li> <li>3. Environmental Studies (L-T-P: 3-0-0)</li> <li>4. Engg Drawing &amp; Visualization (L-T-P: 1-0-2)</li> <li>5. Physics (L-T-P: 3-0-2)</li> <li>6. English in Practice (L-T-P: 3-0-0)</li> </ol> <p style="text-align: center;">Total Credit: 20</p>	<ol style="list-style-type: none"> <li>1. Engg Foundation-II (Data Structure) (L-T-P: 3-0-2)</li> <li>2. Engg Mathematics-II (Probability and Statistics) (L-T-P: 3-1-0)</li> <li>3. Principles of Economics (L-T-P: 2-0-0)</li> <li>4. Product Realization (L-T-P: 1-0-2)</li> <li>5. Chemistry (L-T-P: 3-0-2)</li> <li>6. Introduction to Electrical and Electronics Engg (L-T-P: 3-0-2)</li> </ol> <p style="text-align: center;">Total credit: 20</p>
3rd Sem	4th Sem
<ol style="list-style-type: none"> <li>1. Digital Logic and Systems Design (L-T-P: 3-0-2)</li> <li>2. Engg Foundation-III (Introduction to Artificial Intelligence) (L-T-P: 3-1-0)</li> <li>3. IPR and Law (L-T-P: 2-0-0)</li> <li>4. Linear Algebra (L-T-P: 3-1-0)</li> <li>5. Principle of Programming Languages (L-T-P: 3-1-0)</li> <li>6. DBMS (L-T-P: 3-0-2)</li> </ol> <p style="text-align: center;">Total Credits: 22</p>	<ol style="list-style-type: none"> <li>1. Computer Architecture (L-T-P: 3-0-2)</li> <li>2. Professional Ethics (L-T-P: 2-0-0)</li> <li>3. Object Oriented Programming (L-T-P: 3-0-2)</li> <li>4. Discrete Mathematical Structures (L-T-P: 3-1-0)</li> <li>5. Design and Analysis of Algorithms (L-T-P: 3-1-0)</li> <li>6. Elective 1 (L-T-P: 3-0-2/3-1-0) (CG/DIP/NumAna)</li> </ol> <p style="text-align: center;">Total Credits: 22</p>
5th Sem	6th Sem
<ol style="list-style-type: none"> <li>1. Theory of Computation (L-T-P: 3-1-0)</li> <li>2. Machine Learning (L-T-P: 3-0-2)</li> <li>3. Operating Systems (L-T-P: 3-0-2)</li> <li>4. Computer Networks (L-T-P: 3-1-0)</li> <li>5. Elective 2 (Intro to Bioinformatics) (L-T-P: 3-0-2/3-1-0)</li> <li>6. Optional Course *</li> </ol> <p style="text-align: center;">Total Credits: 20</p>	<ol style="list-style-type: none"> <li>1. Compiler Design (L-T-P: 3-1-0)</li> <li>2. Technical Writing (L-T-P: 2-0-0)</li> <li>3. Software Engineering (L-T-P: 3-0-0)</li> <li>4. Computer Vision (L-T-P: 3-1-0)</li> <li>5. Elective 3 (Intro to Cyber Threats) (L-T-P: 3-1-0)</li> <li>6. Elective 4 (Adhoc Net/Wireless) (L-T-P: 3-0-0)</li> </ol> <p style="text-align: center;">Total Credits: 20</p>
7th Sem	8th Sem
<ol style="list-style-type: none"> <li>1. Project (Engineering Specific) (Credits: 6)</li> <li>2. Elective 5 (L-T-P: 3-0-2) (NLP/BN)</li> <li>3. Elective 6 -SWARM Intelligence/nature inspired algorithms (L-T-P: 3-0-0)</li> <li>4. Elective 7 (Cryptography/ Data Warehouse) (L-T-P: 3-0-0)</li> </ol> <p style="text-align: center;">Total Credits: 16</p>	<p>Dissertation On-campus/ Industry internship* (SOE project evaluation committee will evaluate project done by student in this semester)</p> <p>*Student needs to find a qualified Industry option himself/herself for the dissertation at industry. Dean SoE/Internship coordinator needs to approve the internship at Industry based on the Company profile and the work profile given to the student.</p> <p>Only after approval student is allowed to go for industry (Credits: 20)</p>

**Total Credits 160**