ANNEXURE B

CSE course structure from academic year 2023 and onwards

1st Sem 1. Engg Foundation-I (Computer Programming) (L-T-P: 3-0-2) 2. Engg Mathematics-I (Calculus and Transform) (L-T-P: 3-1-0) 3. Environmental Studies (L-T-P: 3-0-0) 4. Engg Drawing & Visualization (L-T-P: 1-0-2) 5. Physics (L-T-P: 3-0-2) 6. English in Practice (L-T-P: 3-0-0) Total Credit: 20	2nd Sem 1. Engg Foundation-II (Data Structure) (L-T-P: 3-0-2) 2. Engg Mathematics-II (Probability and Statistics) (L-T-P: 3-1-0) 3. Principles of Economics (L-T-P: 2-0-0) 4. Product Realization (L-T-P: 1-0-2) 5. Chemistry (L-T-P: 3-0-2) 6. Introduction to Electrical and Electronics Engg (L-T-P: 3-0-2) Total credit: 20
3rd Sem 1. Digital Logic and Systems Design (L-T-P: 3-0-2) 2. Engg Foundation-III (Introduction to Artificial Intelligence) (L-T-P: 3-1-0) 3. IPR and Law (L-T-P: 2-0-0) 4. Linear Algebra (L-T-P: 3-1-0) 5. Principle of Programming Languages (L-T-P: 3-1-0) 6. DBMS (L-T-P: 3-0-2) Total Credits: 22	4th Sem 1. Computer Architecture (L-T-P: 3-0-2) 2. Professional Ethics (L-T-P: 2-0-0) 3. Object Oriented Programming (L-T-P: 3-0-2) 4. Discrete Mathematical Structures (L-T-P: 3-1-0) 5. Design and Analysis of Algorithms (L-T-P: 3-1-0) 6. Elective 1 (L-T-P: 3-0-2/3-1-0) (CG/DIP/NumAna) Total Credits: 22
5th Sem 1. Theory of Computation (L-T-P: 3-1-0) 2. Machine Learning (L-T-P: 3-0-2) 3. Operating Systems (L-T-P: 3-0-2) 4. Computer Networks (L-T-P: 3-1-0) 5. Elective 2 (Intro to Bioinformatics) (L-T-P: 3-0-2/3-1-0) 6. Optional Course * Total Credits: 20	6th Sem 1. Compiler Design (L-T-P: 3-1-0) 2. Technical Writing (L-T-P: 2-0-0) 3. Software Engineering (L-T-P: 3-0-0) 4. Computer Vision (L-T-P: 3-1-0) 5. Elective 3 (Intro to Cyber Threats) (L-T-P: 3-1-0) 6. Elective 4 (Adhoc Net/Wireless) (L-T-P: 3-0-0) Total Credits: 20
7th Sem 1. Project (Engineering Specific) (Credits: 6) 2. Elective 5 (L-T-P: 3-0-2) (NLP/BN) 3. Elective 6 -SWARM Intelligence/nature inspired algorithms (L-T-P: 3-0-0) 4. Elective 7 (Cryptography/ Data Warehouse) (L-T-P: 3-0-0) Total Credits: 16	8th Sem Dissertation On-campus/ Industry internship* (SOE project evaluation committee will evaluate project done by student in this semester) *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. Only after approval student is allowed to go for industry (Credits: 20)

Total Credits 160

ECE course structure from academic year 2023 and onwards

1st Sem 1.Engg Foundation-I (Computer Programming) (L-T-P: 3-0-2) 2.Engg Mathematics-I (Calculus and Transform) (L-T-P: 3-1-0) 3.Environmental Studies (L-T-P: 3-0-0) 4.Engg Drawing & Visualization (L-T-P: 1-0-2) 5.Physics (L-T-P: 3-0-2) 6.English in Practice (L-T-P: 3-0-0) Total Credit: 20	2nd Sem 1.Engg Foundation-II (Data Structure) (L-T-P: 3-0-2) 2.Engg Mathematics-II (Probability and Statistics) (L-T-P: 3-1-0) 3.Principles of Economics (L-T-P: 2-0-0) 4.Product Realization (L-T-P: 1-0-2) 5.Chemistry (L-T-P: 3-0-2) 6.Introduction to Electrical and Electronics Engg (L-T-P: 3-0-2) Total credit: 20
3rd Sem 1. Digital Logic and Systems Design (L-T-P: 3-0-2) 2. Engineering Foundation-III (Introduction to Artificial Intelligence) (L-T-P: 3-1-0) 3. IPR and Law (L-T-P: 2-0-0) 4. Linear Algebra (L-T-P: 3-1-0) 5. Network Analysis and Synthesis (L-T-P: 3-1-0) 6. Semiconductor Devices and Synthesis (L-T-P: 3-1-0) Total Credit: 22	4th Sem 1. Computer Architecture (L-T-P: 3-0-2) 2. Professional Ethics (L-T-P: 2-0-0) 3. Signal and Systems (L-T-P: 3-1-0) 4. Analog Electronics (L-T-P: 3-1-0) 5. Principles of Communication (L-T-P: 3-0-2) 6. Elective 1 (L-T-P: 3-0-2/3-1-0) (CG/DIP/Numerical Analysis) Total Credit: 22
5th Sem 1. Digital Communication (L-T-P: 3-1-0) 2. Electromagnetic Field Theory (L-T-P: 4-0-0) 3. Control Systems (L-T-P: 3-1-0) 4. Machine Learning (L-T-P: 3-0-2) 5. Elective 1 (Introduction to Bioinformatics/Digital Signal processing (L-T-P: 3-0-2/3-1-0) 6. Optional Course* Total Credit: 20	6th Sem 1. Introduction to VLSI Design (L-T-P: 3-1-0) 2. Technical Writing (L-T-P: 2-0-0) 3. Antenna and Wave Propagation (L-T-P: 3-1-0) 4. Computer Vision (L-T-P: 3-1-0) 5. Elective 3 (Information theory and Coding) (L-T-P: 3-1-0) 6. Elective 4 (Wireless Communication) (L-T-P: 3-0-0) Total Credit: 21
7th Sem 1. Project (Engineering Specific) (Credits: 6) 2. Fibre Optical Communication (L-T-P: 3-1-0) 3. Elective 5 (L-T-P: 3-1-0) (Introduction to non-linear dynamics/Basics of RF and Microwave) 4. Elective 6 (Advanced Antenna Systems) (L-T-P: 3-0-0) Credits : 16	8th Sem Dissertation On-campus /in-Industry* (Credits: 15) Student needs to find a qualified Industry option himself/herself for the dissertation at industry. Dean, SoE/Internship coordinator needs to approve the Dissertation at Industry based on the Company profile and the work profile given to the student. Only after approval student is allowed to go for industry dissertation Credits: 20

Total credits 161