Appendix 2

B. Tech CSE Structure 2024 and onwards
Computer Science & Engineering, SoE

1st Sem	2nd Sem
1. Engg Foundation-I (Computer Programming) (3-0-2) 2. Engg Mathematics-I (Calculus and Transform) (3-1-0) 3. Environmental Studies (3-0-0) 4. Engg Drawing & Visualization (2-0-2) 5. Physics (3-0-2) 6. English in Practice (3-0-0) **Total Credit: 21**	1. Engg Foundation-II (Data Structure) (3-0-2) 2. Engg Mathematics-II (Probability and Statistics) (3-1-0) 3. Principles of Economics (2-0-0) 4. Product Realization (1-0-2) 5. Intro to Data Science using Python (3-1-0) 6. Introduction to Electrical and Electronics Engg (3-0-2) **Total credit: 20**
3rd Sem	**4th Sem**
1. Digital Logic and Systems Design (3-0-2) 2. Engg Foundation-III (Introduction to AI) (3-1-0) 3. Linear Algebra (3-1-0) 4. Object Oriented Programming with JAVA (3-0-2) 5. DBMS (3-0-2) **Total Credits: 20**	1. Computer Architecture (3-0-2) 2. IPR and IT Law (2-0-0) 3. Discrete Mathematical Structures (3-1-0) 4. Design and Analysis of Algorithms (3-1-0) 5. Mobile App Development (3-0-2) 6. Elective 1 (CG/DIP/NumAna/DSP/Mini project) (3-0-2) **Total Credits: 22**
5th Sem	**6th Sem**
1. Machine Learning (3-0-2) 2. Professional Ethics and Technical Writing (3-0-0) 3. Operating Systems (3-0-2) 4. Theory of Computation (3-1-0) 5. Computer Networks (3-1-0) 6. Software Engineering (3-0-2) **Total Credits: 23**	1. Computer Vision (3-1-0) 2. Mobile Computing (3-0-0) 3. Compiler Design (3-1-0) 4. Elective 2 (Intro to Cyber Threats)(3-0-0) 5. Elective 3 (Quantam Computing/BioInformatics) (3-0-0) 6. Elective 4 (OT/OR/Web Technology/Mini Project) (3-0-0) **Total Credits: 20**
7th Sem	**8th Sem**
1. Project (Engineering Specific) (Credits: 6) 2. Elective 5 (NLP/Malware) (3-0-2) 3. Elective 6 (SWARM/nature inspired/Mini Project) (3-0-0) 4. Elective 7 (Cryptography/ Data Warehouse/Network Security (3-0-0) **Total Credits: 16**	**Dissertation On-campus/ Industry internship*** *Student needs to find a qualified Industry option himself/herself for the dissertation at industry. Dean SoE/Internship coordinator needs to approve theinternship at Industry based on the Company profile and the work profile givento the student. Only after approval student is allowed to go for industry. **Total Credits: 20**

Total Credits: 162