

Division	Faculty of Engineering and Technology
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Engineering and Technology
Programme Name	B.Tech Computer Science and Engineering (Artificial Intelligence and Data Science)

Sem-I	20
Programme Foundation	13
Chemistry	3
Engineering Graphics	3
Ideas and Innovation in Manufacturing	1
Linear Algebra and Differential Calculus	3
Physics	3
University Core	7
Effective Communication	1
Environment and Sustainability	1
Foundations of Peace	2
Indian Constitution	1
Learning to Learn	1
Yoga-1	1
Sem-II	20
Programme Capstone Project/Problem Based Learning/Seminar and Internships	4
Computer Architecture and System Design	4
Programme Foundation	11
Biology for Engineers	2
Discrete Mathematics with Graph Theory	3
Engineering Mechanics	3
Programming and Problem Solving	3
University Core	5
Co-Creation	1
Critical Thinking	1
Digital Literacy	1
Financial Literacy	1
Yoga -II	1
Sem-III	22
Programme Capstone Project/Problem Based Learning/Seminar and Internships	3
Data Structures Lab-I	1
Object Oriented Programming using C++	1
Project Based Learning – I	1
Programme Foundation	4
Differential Equations and Transform Techniques	4
Programme Major	7
Data Structures	3
Database Management Systems	4
University Core	4
Research Innovation Design Entrepreneurship (RIDE)	1
Rural Immersion	1

Spiritual and Cultural Heritage: Indian Experience	2
University Elective	4
University Elective- I	4
Sem-IV	21
Programme Capstone Project/Problem Based Learning/Seminar and Internships	5
Data Engineering Concepts	4
Project Based Learning-II	1
Programme Foundation	4
Probability and Statistics	4
Programme Major	8
Artificial Intelligence and Expert Systems	4
Operating Systems	4
University Elective	4
University Elective- II	4
Sem-V	23
Programme Capstone Project/Problem Based Learning/Seminar and Internships	1
University Elective-III	1
Programme Elective	4
Professional Elective -I	4
Programme Major	12
Cognitive Computing and Natural Language Processing	4
Data Visualization using Python	1
Machine Learning	4
Theory of Computation	3
University Core	2
Managing Conflicts Peacefully: Tools and Techniques	2
University Elective	4
Project Based Learning – III [ESIOT]	4
Sem-VI	20
Programme Capstone Project/Problem Based Learning/Seminar and Internships	3
Mini Project using Java Programming	1
Project Based Learning – IV [FSD]	1
Seminar	1
Programme Elective	4
Programme Elective -II	4
Programme Major	11
Data Science Using R	1
Deep Learning	4
Network and Cyber Security	3
Software Engineering and Modelling	3
University Core	2
National Academic Immersion	2
Sem-VII	20
Programme Capstone Project/Problem Based Learning/Seminar and Internships	6
Capstone Project	6

Programme Elective	4
Programme Elective -III	4
Programme Major	10
Bigdata Technologies	4
Design and Analysis of Algorithm	3
Distributed and Cloud Computing	3
Sem-VIII	14
Programme Capstone Project/Problem Based Learning/Seminar and Internships	10
Internship	10
Programme Elective	4
Professional Elective IV	4
Grand Total	160

LIST OF ELECTIVES

Semester	Course Name/ Course Title	Programme Elective
V	User Interface and User Experience Design (CET4008B)	Programme Elective- I
V	Graph Machine Learning (CET4023B)	Programme Elective- I
V	System Software and Compiler Design (CET3011B)	Programme Elective- I
V	AI Systems and Applications	Programme Elective- I
VI	Computer Vision (CET4011B)	Programme Elective- II
VI	Augmented Reality and Virtual Reality (CET4009B)	Programme Elective- II
VI	Edge Artificial Intelligence (CET4024B)	Programme Elective- II
VI	Soft Computing (CET4025B)	Programme Elective- II
VII	Gamification (CET4026B)	Programme Elective- III
VII	Time Series Analysis and Forecasting	Programme Elective- III
VII	Bioinformatics Algorithms and Applications (CET4028B)	Programme Elective- III
VII	Blockchain Technology (CET4007B)	Programme Elective- III
VIII	Generative Adversarial Network	Programme Elective- IV
VIII	Sentiment and Emotional Analysis	Programme Elective- IV
VIII	Pattern Recognition	Programme Elective- IV
VIII	Scalable Data Science	Programme Elective- IV