

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

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 -I		1
Sem II		20
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
Programme Capstone Project/Problem Based Learning/Seminar and Internships		4
Computer Architecture and System Design		4
Sem III		22
Programme Foundation		4
Differential Equations and Transform Techniques		4
University Core		4
Research Innovation Design		1
Entrepreneurship (RIDE)		1
Rural Immersion		1
Spiritual and Cultural Heritage: Indian		1
Experience		2
Programme Capstone Project/Problem Based Learning/Seminar and Internships		4

Data Structures Lab	1
Object Oriented Concepts using C++	2
Project Based Learning – I	1
Programme Major	6
Data Structures	3
Microprocessor, Microcontroller and Applications	3
University Elective	4
University Electives - I	4
Sem IV	20
Programme Foundation	4
Probability and Statistics	4
Programme Capstone Project/Problem Based Learning/Seminar and Internships	1
Project Based Learning – II	1
Programme Major	11
Computer Networks	4
Database Management System	4
Software Engineering and Modelling	3
University Elective	4
University Electives - II	4
Sem V	23
University Core	2
Managing Conflicts Peacefully: Tools and Techniques	2
Programme Capstone Project/Problem Based Learning/Seminar and Internships	1
Project Based Learning – III	1
Programme Major	12
Artificial Intelligence and Expert Systems	4
Design and Analysis of Algorithms	3
Internet of Things Laboratory	1
Operating System	4
University Elective	4
University Elective-III	4
Professional Elective	4
Programme Elective -I	4
Sem VI	20
University Core	2
National Academic Immersion	2
Programme Capstone Project/Problem Based Learning/Seminar and Internships	6
Data Engineering and Data Visualization	3
Mini Project using Java Programming	1
Project Based Learning – IV	1
Seminar	1
Programme Major	8
Full Stack Development Laboratory	1
Machine Learning	4
Theory of Computation	3

Professional Elective	4
Programme Elective –II	4
Sem VII	21
Programme Capstone Project/Problem Based Learning/Seminar and Internships	6
Capstone Project	6
Programme Major	11
Distributed and Cloud Computing	3
Information and Cyber Security	4
System Software and Compiler Design	4
Professional Elective	4
Programme Elective -III	4
Sem VIII	14
Programme Capstone Project/Problem Based Learning/Seminar and Internships	10
Internship	10
Professional Elective	4
Programme Elective -IV /MOOC	4
Grand Total	160

LIST OF ELECTIVES

Semester	Course Name/ Course Title	Programme Elective
V	Bigdata Technologies (CET4001B)	Programme Elective- I
V	Computer Graphics and 3D Modelling (CET4003B)	Programme Elective- I
V	Wireless and Mobile Networks	Programme Elective- I
V	DevOps	Programme Elective- I
V	Foundations of Digital IC Design	Programme Elective- I
VI	Deep Learning (CET3012B)	Programme Elective-II
VI	Augmented Reality and Virtual Reality (CET4009B)	Programme Elective-II
VI	Cyber Laws and Cyber Crime	Programme Elective-II
VI	Parallel Programming	Programme Elective-II
VI	Fundamentals of VLSI Design	Programme Elective-II
VII	Cognitive Computing and Natural Language Processing (CET4005B)	Programme Elective-III
VII	Unmanned Ariel Vehicle(UAV) and Drone Technology	Programme Elective-III
VII	Vulnerability Identification and Penetration Testing (CET4010B)	Programme Elective-III
VII	Blockchain Technology (CET4007B)	Programme Elective-III
VII	Digital Design Automation	Programme Elective-III
VIII	Soft Computing	Programme Elective-IV
VIII	Computer Vision (CET4011B)	Programme Elective-IV
VIII	Introduction to VLSI Design Verification and Testing	Programme Elective-IV
VIII	5G and Edge Computing	Programme Elective-IV
VIII	User Interface and User Experience Design (CET4008B)	Programme Elective-IV