B.Tech ECE with Specialization in Cellular Technology

I & II Semester (Common to all the branches)

Physics Cycle

- Engineering Mathematics –I
- Physics
- Communicative English
- Problem Solving Through Programming
- Engineering Graphics
- Physics Lab
- Problem Solving Through Programming Lab
- Communicative English Lab

Chemistry Cycle

- Engineering Mathematics II
- Chemistry
- Basics of Electrical Engineering
- Workshop Practice
- Sociology and Elements of Indian History for Engineers
- Chemistry Lab
- Electrical Engineering Lab

III Semester

- Applied Mathematics
- Language I
- Electronic Circuit Design I
- Digital System Design using Verilog
- Network Analysis
- General Elective I
- Electronic Circuit Design I Lab
- Digital System Design using Verilog Lab
- Mind Management and Human Values (MMHV)-3
- Project Centric Learning
- Diploma Mathematics-I

IV Semester

- Probability and Statistics Processes
- Language II
- Microprocessors and Microcontrollers
- Electronic Circuit Design II
- Signals and Systems
- General Elective II
- Microprocessors and Microcontrollers Lab
- Electronic Circuit Design II Lab
- Mind Management and Human Values (MMHV)-4
- Project Centric Learning
- Diploma Mathematics-II

V Semester

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- Electromagnetic Field Theory
- Digital Signal Processing
- Control Systems
- Analog and Digital Communication
- Embedded System Architecture
- General Elective III
- Digital Signal Processing Lab
- Analog and Digital Communication Lab
- Mind Management and Human Values (MMHV)-5
- Project Centric Learning

VI Semester



- Economics for Engineers
- Mobile Communication
- Antenna and Wave Propagation
- VLSI Design
- Discipline Specific Elective I
- General Elective IV
- Wireless Communication and Antenna Lab
- VLSI Design Lab
- Mind Management and Human Values (MMHV)-6
- Internship/Minor Project

VII Semester

- Computer Networks
- Millimeter and Optical Wave Communication
- Discipline Specific Elective II
- Discipline Specific Elective III
- Constitutional Values
- Computer Networks Lab
- Mind Management and Human Values (MMHV)-4
- Project Dissertation Phase I

VIII Semester

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- Discipline Specific Elective IV
- Discipline Specific Elective V
- Environmental Science
- Project Dissertation Phase II

Specialization Courses: Cellular Technology (Semester Wise)



Sl. No.	Semester	Course Name
1	6	Spread Spectrum Technology
2	6	Antennas for Mobile Systems
3	7	Satellite Communication in 5G networks
4	7	Introduction to 4G and 5G Networks
5	7	Minor Project on Communication Technology
6	8	Tele Communication System: GPS and GPRS
7	8	5G RF Planning
8	8	Minor Project on Cellular Technology

List of Department Specific Elective Courses (Semester Wise)

Discipline Specific Elective - I

Semester	Domain	Subjects
6	COMMUNICATION	Satellite Communication
	EMBEDDED Systems	RFID and Flexible Sensors
	VLSI	CAD for VLSI

Discipline Specific Elective - II

Semester	Domain	Subjects
6	COMMUNICATION	RADAR and Navigation
	EMBEDDED Systems	MSP 430 Microcontroller
	Signal Processing	Image Processing

Discipline Specific Elective - III

Semester	Domain	Subjects
7	COMMUNICATION	VoIP
	EMBEDDED Systems	IOT with Arduino and Raspberry Pi
	Signal Processing	Navigation and Remote Sensing

Discipline Specific Elective - IV

Semester	Domain	Subjects
7	COMMUNICATION	Cognitive Radio Networks
	EMBEDDED Systems	Robotics and Automation
	VLSI	System on Chip

Discipline Specific Elective - V

Semester	Domain	Subjects
8	COMMUNICATION	Wireless Sensor Networks
	VLSI	Low Power VLSI
	Embedded Systems	Real Time Embedded Systems 2. Open Source Systems