B.Tech. Electronics and Communication Engineering

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

- 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

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

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	1. Real Time Embedded Systems 2. Open Source Systems