



SCHOOL OF ENGINEERING AND APPLIED SCIENCE

Course Curriculum
B.Tech(4-YEAR DEGREE PROGRAM)

Electronics and Communication Engineering

I & II SEMESTER

SL NO	LIST OF SUBJECTS
1	Calculus and Linear Algebra
2	Engineering Physics
3	Basic Electrical Engineering
4	Elements of Civil Engineering and Mechanics
5	Engineering Graphics
6	Engineering Physics Laboratory
7	Basic Electrical Engineering Laboratory
8	Technical English-I
9	Engineering Chemistry
10	C Programming For Problem Solving
11	Basic Electronics
12	Elements of Mechanical Engineering
13	Engineering Chemistry Laboratory
14	C Programming Laboratory
15	Advanced Calculus and Numerical Methods
16	Technical English-II

III SEMESTER

SL NO	LIST OF SUBJECTS
1	Mathematics
2	Electronic Devices
3	Digital System Design
4	Network Theory
5	Probability Theory and Statistics
6	Power Electronics & Instrumentation
7	Electronic Devices Laboratory
8	Digital System Design Laboratory
9	Vyavaharika Kannada (Kannada for Communication)
10	Aadalitha Kannada (Kannada for Administration) OR
11	Constitution of India, Professional Ethics and Cyber Law

IV SEMESTER

SL NO	LIST OF SUBJECTS
1	Mathematics
2	Principles of Communication Systems
3	Analog Circuits
4	Verilog HDL
5	Signals and Systems
6	Computer Architecture
7	Analog Circuits & Communication Laboratory
8	HDL Lab
9	Vyavaharika Kannada (Kannada for Communication)
10	Aadalitha Kannada (Kannada for Administration) OR
11	Constitution of India, Professional Ethics and Cyber Law

V SEMESTER

SL NO	LIST OF SUBJECTS
1	Management & Entrepreneurship Development
2	Electromagnetic Waves
3	Digital Signal Processing
4	Information Theory & Coding
5	Control Systems
6	Microcontroller (8051)
7	Microcontroller Laboratory
8	Digital Signal Processing Laboratory
9	Environmental Studies

VI SEMESTER

SL NO	LIST OF SUBJECTS
1	Digital Communication
2	Embedded Systems (Includes ARM Controller)
3	Computer Networks
4	Professional Elective-1
5	Open Elective-A
6	Embedded Systems Laboratory
7	Computer Networks Laboratory
8	Mini Project
9	Internship

VII SEMESTER

SL NO	LIST OF SUBJECTS
1	Microwave & Antenna
2	VLSI Design
3	Professional Elective-2
4	Professional Elective-3
5	Open Elective-B
6	Advanced Communication Laboratory
7	VLSI Laboratory
8	Project Work Phase-I
9	Internship

VIII SEMESTER

SL NO	LIST OF SUBJECTS
1	Wireless Communication
2	Professional Elective-4
3	Project Work Phase-2
4	Technical Seminar
5	Internship

PROFESSIONAL ELECTIVE-1

SL NO	LIST OF SUBJECTS
1	Operating System
2	Artificial Neural Networks
3	Satellite Communication/Microelectronics

OPEN ELECTIVE-A

SL NO	LIST OF SUBJECTS
1	Signal Processing
2	Automotive Electronics
3	Sensors & Actuators

PROFESSIONAL ELECTIVE-2

SL NO	LIST OF SUBJECTS
1	Real Time System/Low Power Microcontroller (With MSP430)
2	OOPs
3	Digital Image Processing

PROFESSIONAL ELECTIVE-3

SL NO	LIST OF SUBJECTS
1	IoT & Wireless Sensor Networks
2	Cryptography & Network Security
3	Multimedia Communication

OPEN ELECTIVE-B

SL NO	LIST OF SUBJECTS
1	Communication Theory
2	MEMS
3	Mobile Operating Systems

PROFESSIONAL ELECTIVE-4

SL NO	LIST OF SUBJECTS
1	Digital System Design Using Verilog
2	Optical Communication Networks
3	Advanced Cellular Communication