

M.Tech-Communication Systems (IC Design) - Batch 2020-22
COURSE STRUCTURE

SEMESTER - I

Sl.No	Course Code	Course Name	L	T	P	Hrs/Week	Total Credits
1	MTEC131	Advanced Radiation Systems	3	0	0	3	3
2	MTEC132	Advanced Communication Networks	3	0	0	3	3
3	MTEC133	Elective - I	3	0	0	3	3
4	MTEC134	Elective - II	3	0	0	3	3
5	MTEC151	Antennas and Radiating Systems Lab	0	0	2	2	2
6	MTEC152	Communication Systems Lab	0	0	2	2	2
7	MLC131	Research Methodology and IPR	2	0	0	2	2
8	AC131	Audit Course I	2	0	0	2	0
9	HE171	Holistic Education-I	1	0	0	1	1
		Total				21	19

SEMESTER - II

Sl.No	Course Code	Course Name	L	T	p	Hrs/Week	Total Credits
1	MTEC231	Wireless & Mobile Communication	3	0	0	3	3
2	MTEC232	Modern Digital Signal Processing	3	0	0	3	3
3	MTEC233	Elective - III	3	0	0	3	3
4	MTEC234	Elective - IV	3	0	0	3	3
5	MTEC251	Wireless & Mobile Communication Lab	0	0	2	2	2
6	MTEC252	Modern Digital Signal Processing Lab	0	0	2	2	2
7	MTEC253	Mini Project	0	0	4	4	2
8	AC231	Audit Course-2	2	0	0	2	0
9	HE271	Holistic Education-II	1	0	0	1	1
		Total				23	19

SEMESTER - III

Sl.No	Course Code	Course Name	Theory Hrs	Tutorial Hrs	Practical Hrs	Hrs/Week	Total Credits
1	MTEC331	Elective - V	3	0	0	3	3
2	MTEC332	Elective - VI	3	0	0	3	3
3	MTEC371	Dissertation Phase -I	0	0	20	20	10
		Total				26	16

SEMESTER - IV

Sl.No	Course Code	Course Name	Theory Hrs	Tutorial Hrs	Practical Hrs	Hrs/Week	Total Credits
1	MTEC471	Dissertation Phase - II	0	0	32	32	16
		Total				32	16

LIST OF PROGRAM ELECTIVES

Communication Systems Elective	
S.No	Course Name
1	Advanced Digital communication
2	Applied Mathematics for Electronics Engineers
3	Optical Communication Networks
4	Multimedia Compression Techniques
5	Space Time wireless communication
6	Communication Network Security
7	RF System Design
8	Advanced Microwave Systems
9	Communication protocol Engineering
10	Speech and Audio Signal Processing.
11	Network Routing Algorithms
12	Simulation of Communication Systems and Network

13	Detection and estimation theory
14	Digital Communication Receivers
15	Digital Image Processing
16	High Performance Communication Networks
17	Advanced Microstrip Antennas
18	Non-Linear Optical Networks

IC Design Electives	
S.No	Course Name
1	IC Process Technology and CMOS VLSI Design
2	Embedded System and SoC Design
3	Digital System Design using Verilog
4	CAD and EDA for VLSI Circuits
5	Low Power VLSI Design
6	Advanced Computer Architecture
7	Advanced Microprocessors and Microcontrollers
8	SoC Design for Embedded System and IoT
9	VLSI Signal Processing
10	Testing of VLSI Circuits (DFT)
11	Hardware Software Co-Design
12	CMOS Analog & IO Circuit Design
13	CMOS Mixed Signal Design
14	CMOS Digital Circuit Design and Characterization
15	Analog and Mixed Signal Verification
16	CMOS RF Circuit Design

LIST OF OPEN ELECTIVES

SI No	Course Name	M	C
1	Business Analytics	100	3
2	Industrial Safety	100	3
3	Operations Research	100	3
4	Cost Management of Engineering Projects	100	3
5	Composite Materials	100	3
6	Waste to Energy	100	3

LIST OF AUDIT COURSES

SI No	Course Name
1	English for Research Paper Writing
2	Disaster Management
3	Value Education
4	Constitution of India
5	Pedagogy Studies
6	Stress Management by Yoga
7	Personality Development through Life Enlightenment Skills