School of Engineering and Technology

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

M.TECH – ELECTRONICS AND COMMUNICATION ENGINEERING
SEMESTER I & II

COURSE STRUCTURE & SYLLABUS
AY 2023-24

Semester I

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	IA	EA
T	1.	PCC		RTL Simulation and Synthesis with PLDs	2	1	0	3	40	60
T	2.	PCC		Wireless and Mobile Communication	2	1	0	3	40	60
T	3.	PCC		Digital Signal and Image Processing	2	1	0	3	40	60
T	4.	PE-I		Program Specific Elective-I	3	0	0	3	40	60
T	5.	OE-1		Open Elective I	3	0	0	3	40	60
P	6.	LAB I		RTL Simulation and Synthesis with PLDs Lab	0	0	4	2	50	50
T	7.	MC		Research Methodology	2	0	0	2	40	60
T	8.	AC		Audit Course – I	2	0	0	0	00	100
				Total	**16**	**3**	**4**	**19**	**290**	**510**

Semester II

Theory/ Practical	Sl. No	Course Type	Course Code	Course Name	Hours per week			Credit	Mark	
					L	T	P	C	IA	EA
T	1.	PCC		Pattern Recognition and Machine Learning	2	1	0	3	40	60
T	2.	PCC		Advanced Digital Signal Processing	2	1	0	3	40	60
T	3.	PCC		Analog and Digital CMOS VLSI Design	2	1	0	3	40	60
T	4.	PE-II		Program Specific Elective-II	3	0	0	3	40	60
T	5.	PE-III		Program Specific Elective-III	3	0	0	3	40	60
P	6.	LAB II		Analog and Digital CMOS VLSI Design Lab	0	0	4	2	50	50
P.	7.			Mini Project	0	0	4	2	40	60
T	8.	AC		Audit Course – II	2	0	0	0	00	100
				Total	**14**	**3**	**8**	**19**	**290**	**510**

Program Elective – I

Sl.No.	Course Type	Code	Course
1.	PEC		DSP Architecture
2.	PEC		Computer Vision
3.	PEC		Optical Networks
4.	PEC		Statistical Information Processing
5.	PEC		Programming Languages for Embedded Software
6.	PEC		VLSI signal processing

Open Elective-I

Sl.No.	Course Type	Code	Course
1.	OE		VLSI Design Verification and Testing
2.	OE		Low power VLSI Design
3.	OE		Satellite Communication
4.	OE		IOT and Applications
5.	OE		Digital Design and Verification
6.	OE		Memory Technologies

Program Elective – II

Sl.No.	Course Type	Code	Course
1.	PEC		Biomedical Signal Processing
2.	PEC		Artificial Intelligence
3.	PEC		Modelling and Simulation Techniques
4.	PEC		Remote Sensing
5.	PEC		Physical design automation
6.	PEC		Nano materials and Nanotechnology

Program Elective-III

Sl.No.	Course Type	Code	Course
1.	PEC		Audio Video Coding & Compression
2.	PEC		Voice and Data Networks
3.	PEC		Cognitive Radio
4.	PEC		RF and Microwave Circuit Design
5.	PEC		System Design with Embedded Linux
6.	PEC		CAD of Digital System

Audit Course – I

Sl.No.	Course Type	Code	Course
1.	AU		English for Research paper writing
2.	AU		Disaster Management
3.	AU		Value Education

Audit Course – II

Sl.No.	Course Type	Code	Course
1.	AU		Personality Development through Life Enlightenment Skills.
2.	AU		Constitution of India
3.	AU		Pedagogy Studies
4.	AU		Stress Management by Yoga