Course Structure for MTech ECE (without specialization)

Admitted 2024 onwards

Semester I

SN	Course Code	Course Name	L- T- P (Hours)	Credits
1		Advanced Communication System	3-0-0	3
2		VLSI Circuits & System Design	3-0-0	3
3		DE -I	3-0-0	3
4		DE – II	3-0-0	3
5		Research Methodology and IPR	2-0-0	2
6		Advanced Communication System Lab	0-0-2	1
7		VLSI Circuits & System Design Lab	0-0-2	1
8		ECE Design & Simulation Lab	0-0-2	1
		TOTAL	20	17

Semester II

SN	Course Code	Course Name	L –T- P (Hours)	Credits
1		Advanced Digital Signal Processing	3-0-0	3
2		Advanced Microprocessor& Microcontroller	3-0-0	3
3		DE –III (Based on Specialization)	3-0-0	3
4		DE – IV (Based on Specialization)	3-0-0	3
5		DE – V (Based on Specialization)	3-0-0	3
6		Advanced Microprocessor& Microcontroller Lab	0-0-2	1
7		Advanced Digital Signal Processing Lab	0-0-2	1
8		Minor Project (based on Specialization)	0-0-6	3
9		Audit Course - I	2-0-0	Qualifying
		TOTAL	27	20

Semester III

SN	Course Code	Course Name	L- T –P (Hours)	Credits
1		Open Elective	3-0-0	3
		Elective – V (Based on Specialization)	3-0-0	3
2		Seminar and Term Paper	0-0-4	2
3		Project Based Learning	0-0-8	4
4		Dissertation - I	0-0-8	4
5		Audit course -II	2-0-0	Qualifying
6		**TOTAL**	28	16

Semester IV

SN	Course Code	Course Name	L -T –P (Hours)	Credits
1		Dissertation - II/Industrial Project	0-0-30	15
		Total	30	15

Total Credits = 68

Discipline Elective (To be updated from time to time)		
S. No.	**Course Code**	**Title**
1.	EC701	Detection and Estimation
2.	EC702	Speech Processing
3.	EC703	Embedded System Design
4.	EC704	CMOS Digital Design Technique
5.	EC707	Algorithms for VLSI Design Automation
6.	EC708	Digital Image Processing
7.	EC709	Advanced Error Control Coding
8.	EC710	Analogue VLSI Design
9.	EC711	Deep Learning for wireless communication
10.	EC713	Advanced Computer Architecture
11.	EC714	Digital Signal Processors and Applications
12.	EC715	Performance Evaluation of Communication Systems
13.	EC716	Spread Spectrum Theory
14.	EC718	EM Theory for Microwave and Fiber Optics
15.	EC719	RF Microelectronics
16.	EC720	Digital Video Processing
17.	EC721	VLSI Signal Processing

Open Elective: Communication Systems & Applications