

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
(M. Tech Course Structure (R25 Regulation))

I M.TECH. (I Sem)

Branch / Specialization: VLSI & ES

S.NO	Course Code	Name of the Course	Contact Hours per Week			Credits
			L	T	P	
1	R25MVE01	Embedded System Design	3	0	0	3
2	R25MVE02	CMOS VLSI Design	3	0	0	3
3	R25MRM03	Research Methodology & IPR	2	0	0	2
4	Professional Elective -I		3	0	0	3
	R25MVE04	Advanced RISC Architectures				
	R25MVE05	Advanced Computer Architecture				
	R25MVE06	GPU Architecture				
5	Professional Elective -II		3	0	0	3
	R25MVE07	Machine Learning and Deep Learning				
	R25MVE08	Edge Computing				
	R25MVE09	Physical Design Automation with AI				
6	R25MVE10	Embedded System Design Laboratory	0	0	4	2
7	R25MVE11	CMOS VLSI Design Laboratory	0	0	4	2
8		Audit Course – I	2	0	0	0
Total			16	0	8	18

L: Lecture Hour

T: Tutorial Hour

P: Lab/Practice Hour

I M.TECH. (II Sem)

Branch/Specialization: VLSI & ES

S.NO	Course Code	Name of the Course	Contact Hours per Week			Credits
			L	T	P	
1	R25MVE12	Embedded Real Time Operating Systems	3	0	0	3
2	R25MVE13	IoT System Design	3	0	0	3
3	Professional Elective - III		3	0	0	3
	R25MVE14	Scripting Languages for Design Automation				
	R25MVE15	VLSI Architectures for Digital Signal Processing				
	R25MVE16	SoC Architectures				
4	Professional Elective - IV		3	0	0	3
	R25MVE17	Wireless Sensor Networks				
	R25MVE18	Automotive Embedded Systems				
	R25MVE19	Hardware-Software Co-Design				
5	R25MVE20	Embedded Real Time Operating Systems Laboratory	0	0	4	2
6	R25MVE21	IoT System Design Laboratory	0	0	4	2
7	R25MVE22	Mini Project with Seminar	0	0	4	2
8		Audit Course – II	2	0	0	0
Total			14	0	10	18

L: Lecture Hour

T: Tutorial Hour

P: Lab/Practice Hour

II M.TECH. (I Sem)
Branch/Specialization: VLSI & ES

S.NO	Course Code	Name of the Course	Contact Hours per Week			Credits
			L	T	P	
1		Open Elective	3	0	0	3
Professional Elective – V						
2	R25MVE23	Hardware Security in VLSI Design	3	0	0	3
	R25MVE24	Software Defined Radio				
	R25MVE25	Embedded Biomedical Applications				
3	R25MVE26	Dissertation Work Review -I & II	0	0	18	6
Total			6	0	18	12

L: Lecture Hour
T: Tutorial Hour
P: Lab/Practice Hour
II M.TECH. (II Sem)
Branch/Specialization: VLSI & ES

S.NO.	Course Code	Name of the Course	Contact Hours per Week			Credits
			L	T	P	
1	R25MVE27	Dissertation Work Review - III	0	0	18	6
2	R25MVE28	Dissertation Viva -Voce	0	0	42	14
Total			0	0	60	20

L: Lecture Hour
T: Tutorial Hour
P: Lab/Practice Hour
Open Elective offered by the Electronics & Communication Engineering

Course Code	Open Electives
R25MOE08	Business Analytics
R25MOE09	Industrial Safety
R25MOE10	Operations Research
R25MOE11	Cost Management of Engineering Projects
R25MOE12	Composite Materials

Audit Course I & II:

Course Code	Audit Course I & II:
R25MAC01	English for Research Paper Writing
R25MAC02	Disaster Management
R25MAC03	Sanskrit for Technical Knowledge
R25MAC04	Value Education
R25MAC05	Constitution of India
R25MAC06	Pedagogy Studies
R25MAC07	Stress Management by Yoga
R25MAC08	Personality Development through Life Enlightenment Skills