M.Tech in ECE with specialization in Machine Learning and Signal Processing Programme w.e.f. 2022-23 Batch

FIRST SEMESTER

Sl. No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1.	17M11EC118	Advanced Digital Signal Processing	3	-	-	3	3
2.	20M31EC113	Introduction to Machine learning	3	-	-	3	3
3.		DE-I	3	-	-	3	3
4.		DE-II	3	-	-	3	3
5.		DE-III	3	-	-	3	3
6.	18M11GE111	Research Methodology and Intellectual Property Rights	2			2	2
7.	20M35EC111	Advanced Signal Processing Lab (Matlab/Python)	-		6	6	3
		TOTAL				23	20

SECOND SEMESTER

Sl. No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1.	17M11EC121	Statistical Signal Processing	3	-	-	3	3
2.	20M31EC115	Deep Learning and Applications	3	-	-	3	3
3.		DE-IV	3	-	-	3	3
4.		DE -V	3	-	-	3	3
5.		Audit-I	2	-	-	2	Qualifying
6.	17M11EC120	Project Based Learning - I				4	2
7.	New Course	Machine Learning Lab(Python)	-	-	6	6	3
		TOTAL				24	17

THIRD SEMESTER

Sl. No.	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
		Open Electives	3			3	3
1.	17M17EC218	Seminar & Term Paper **OR** Earn credits by transfer eg. MOOCs, Course Work at another Institute, Supervised Study				4	4
2	17M15EC114	Project Based Learning - II				8	4
3.	17M17EC219/ 17M17EC220/ 17M17EC221	Dissertation /Industrial Project / Entrepreneurial Project				8	4
		Audit-II	2			2	Qualifying
		TOTAL				25	15

FOURTH SEMESTER

Sl. No.		Title	Contact Hours				Credits
			L	T	P	Total	
1.	17M17EC222/ 17M17EC223/ 17M17EC224	Dissertation /Industrial Project/ Entrepreneurial Project				32	16
		TOTAL				32	16

TOTAL CREDITS:68

Courses for Audit-I and II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through life enlightenment skills

Subjects for Open Electives:

1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials
6. Waste to Energy

Electives

1. Soft Computing
2. Digital Image and Video Processing
3. Hybrid intelligent systems
4. DSP Architecture
5. Pattern Classification
6. Deep learning for Natural language processing
7. Biomedical Signal Processing
8. Speech and Audio Signal Processing
9. Multirate Signal Processing and Filter Banks