M.Tech (ECE)
With Specialization in
Microelectronic Systems and Internet of Things

FIRST SEMESTER

Sl. No	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1.	17M11EC118	Advanced Digital Signal Processing	3	-	-	3	3
2.	20M41EC117	Advanced Digital Communication Systems	3	-	-	3	3
3.		DE-I	3	-	-	3	3
4.		DE-II	3	-	-	3	3
5.	18M11GE111	Research Methodology and Intellectual Property Rights	2	-	-	2	2
6.	20M35EC111	Advanced Signal Processing Lab (MATLAB/PYTHON)	-	-	2	2	1
7.	20M45EC111	Advanced Communication Systems Lab-1			2	2	1
8	20M55EC113	Microelectronics and IOT Lab-1			2	2	1
		TOTAL				20	17

SECOND SEMESTER

Sl. No	Course Code	Title	Contact Hours				Credits
			L	T	P	Total	
1.	17M21EC115	Analogue Integrated Circuit Design	3	-	-	3	3
2.	20M51EC124	IoT Perspective: Cloud Computing and Machine Learning	3	-	-	3	3
3.		DE-III	3	-	-	3	3
4.		DE – IV	3	-	-	3	3
5.		DE – V	3	-	-	3	3
6.		Audit-I	2	-	-	2	Qualifying
7.	17M11EC120	Project Based Learning - I				4	2
8.	20M55EC114	Microelectronics and IoT Lab-2	-	-	6	6	3
		TOTAL				27	20

THIRD SEMESTER

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

FOURTH SEMESTER

Sl. No	Course Code	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
7. IOT Architecture and Protocol

Departmental Electives:

1. Digital Integrated Circuit Design
2. Semiconductor Device Modelling
3. Digital System Testing
4. Advanced Embedded System
5. Fundamentals of Semiconductor devices
6. VLSI Physical Design
7. Mixed Signal IC Design
8. Big Data Analytics for IoT
9. IoT Security
10. VLSI Architecture for DSP Applications
11. Low Power VLSI Design
12. ASIC Verification using System Verilog
13. HDL based Digital System Design
10. Introduction to IoT System Design
11. Introduction to machine Learning