

Department of Electronics and Communication Engineering

Curriculum Structure

M.Tech. Program in ECE (*Specialization in "Wireless Communication and Network Engineering"*)

1 st Semester						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	Advanced Wireless Communication	PC	3	0	0	3
2.	Wireless Communication Lab	PC	0	0	2	1
3.	Communication Signal Processing and Algorithms	PC	3	0	0	3
4.	Wireless and Mobile Networks	PC	3	0	0	3
5.	Program Elective 1	PE	3	0	0	3
6.	Program Elective 2	PE	3	0	0	3
Total Credit						16

2 nd Semester						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	5G Wireless Technology	PC	3	0	0	3
2.		PC	0	0	2	1
3.	Advanced RF Engineering	PC	3	0	0	3
4.	VLSI Circuits and Systems	PC	3	0	0	3
5.	Research Methodology and IPR	IC	2	0	0	2
6.	Program Elective 3	PE	3	0	0	3
7.	Program Elective 4	PE	3	0	0	3
Total Credit						18

3 rd Semester						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	M. Tech. Thesis I	PC	0	0	18	9
2.	Program Elective 5	PE	3	0	0	3
3.	Program Elective 6	PE	3	0	0	3
4.	Open Elective	OE	3	0	0	3
Total Credit						18

4 th Semester						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	M. Tech. Thesis II	PC	0	0	36	18
Total Credit						18
Total Credit						70

Clusters of Program Electives

CLUSTER 1						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	Intelligent Wireless Sensor Networks	PE	3	0	0	3
2.	Software Defined Networks and Applications	PE	3	0	0	3
3.	Internet of Things	PE	3	0	0	3
4.	Error Control Coding	PE	3	0	0	3
5.	AI and Deep Learning for Wireless Communication	PE	3	0	0	3
6.	Optimization Methods in Engineering	PE	3	0	0	3
7.	Statistical Signal Processing for Communication	PE	3	0	0	3
CLUSTER 2						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	Radio Access Networks	PE	3	0	0	3
2.	Advanced Photonics, Communication and Networking	PE	3	0	0	3
3.	Wireless Network Performance Modelling and Analysis	PE	3	0	0	3
4.	Advanced Cryptography	PE	3	0	0	3
5.	Big Data Analytics	PE	3	0	0	3
6.	5G Networks for IoT	PE	3	0	0	3
7.	Detection and Estimation Theory	PE	3	0	0	3
CLUSTER 3						
Sr. No.	Course Name	Type	L	T	P	Credits
1.	Next-generation Wireless Technology	PE	3	0	0	3
2.	Network and Service Management and Control	PE	3	0	0	3
3.	5G Network Architecture and Design	PE	3	0	0	3
4.	Cyber-Physical Systems	PE	3	0	0	3
5.	Embedded Communication	PE	3	0	0	3
6.	Cloud Computing	PE	3	0	0	3
7.	Mm-Wave Technology	PE	3	0	0	3

Note: The electives mentioned above should be chosen as marked 1, 2 from Cluster 1, as marked 3,4 from Cluster-2 and as marked 5,6 from the Cluster-3.