## **GUJARAT TECHNOLOGICAL UNIVERSITY**

# M.E. Electronics and Communication Engineering

#### PROPOSED TEACHING SCHEME

#### Semester I

SR. No.	SUBJECT	TEACHING SCHEME(HOURS)			CREDITS
		THEORY	TUTORIAL	PRACTICAL	CREDITS
1	Statistical Signal Analysis	3	2	0	4
2	Information Theory and Coding	4	0	2	5
3	ASIC Design	4	0	2	5
4	Major Elective 1	3	0	2	4
5	Interdisciplinary/Minor Elective 1	3	0	2	4
6	Communication & Research Skills	2	2	0	3
	Total	19	4	8	25

### **Semester II**

SR. No.	SUBJECT	TEACHING SCHEME(HOURS)			CREDITS
		THEORY	TUTORIAL	PRACTICAL	CKEDIIS
1	Telecom Switching System, Networks and N	3	0	2	4
2	Advanced Digital Communication	4	0	2	5
3	Major Elective 2	4	0	2	5
4	Major Elective 3	3	0	2	4
5	Interdisciplinary Elective 2	3	0	2	4
6	Principles of Management	3	0	0	3
	Total	20	0	10	25

### M.E. Electronics and Communication Engineering

Interdisciplinary Elective - I				
Image Processing				
Interdisciplinary Elective - II				
Introduction to Artificial Intelligence				

SR. NO.	List of Major Elective/ Minor Elective	Teaching Scheme(Hours)			C 114
		Theory	Tutorial	Practical	Credits
1	Fiber Optic Communication	3	0	A2L	4
2	Image Processing	3	0	2	4
3	Speech Processing	3	0	2	4
4	Biomedical Signal Processing	3	0	2	4
5	Embedded System Design	3	0	2	4
6	Introduction to Artificial Intelligence	3	0	2	4
7	RF and Microwave Engineering	3	0	2	4
8	Digital VLSI Design	3	0	2	4
9	RF Microelectronics	3	0	2	4
10	Microelectronics chip fabrication	3	2	0	4
11	Satellite communication	3	2	0	4
12	Antenna Engineering and Design	3	0	2	4
13	Computer Aided Design for VLSI	3	0	2	4
14	Digital Signal Processing and Applications	3	0	2	4
15	Neuro Computing and Applications	3	2	0	4
16	Machine Learning	3	2	0	4
17	Robotics and Intelligent Systems	3	2	0	4
18	Linear System Theory	3	2	0	4
19	Soft Computing Technique and its Application in Engineering	3	0	2	4
20	Recent topics in Modern Communication Engineering	3	2	0	4