## **GUJARAT TECHNOLOGICAL UNIVERSITY**

M.E. Electronics and Communication Engineering PROPOSED TEACHING SCHEME

Semester I									
SR.	SUBJECT	TEACH	CREDITS						
NO.			THEORY	TUTORIAL	PRACTICAL				
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	SUBJECT	TEACHI	CREDITS					
NO		THEORY	TUTORIAL	PRACTICAL				
1	Telecom Switching System, Networks and Network Management	4	0	2	5			
2	Advanced Digital Communication	4	0	2	5			
3	Major Elective 2	3	0	2	4			
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 - 1

Image Processing

## Interdisciplinary Elective - 2

Introduction to Artificial Intelligence

SR.	List of Major Elective	TEACHIN	TEACHING SCHEME(HOURS)			
NO.		THEORY	TUTORIAL	PRACTIC		
1	Fiber Optic Communication	3	0	2	4	
2	Image Processing	3	0	2	4	
3	Speech Processing	3	0	2	4	
4	Biomedical Signal Processing	3	0	2	4	
5	Computer Vision	3	0	2	4	
6	Embedded System Design	3	0	2	4	
7	Introduction to Artificial Intelligence	3	0	2	4	
8	RF and Microwave Engineering	3	0	2	4	
9	Digital VLSI Design	3	0	2	4	
10	RF Microelectronics	3	0	2	4	
11	Optimization Techniques	3	2	0	4	
12	Applied Linear Algebra in Engineering	3	2	0	4	
13	Adaptive signal Processing	3	2	0	4	
14	Microelectronics chip fabrication	3	2	0	4	
15	Satellite communication	3	2	0	4	
16	Antenna Engineering and Design	3	0	2	4	
17	Peripheral System Design & Interfacing	3	0	2	4	
18	Computer Aided Design for VLSI	3	0	2	4	
19	Digital Signal Processing and Applications	3	0	2	4	
20	Neuro Computing and Applications	3	2	0	4	
21	Machine Learning	3	2	0	4	
22	Robotics and Intelligent Systems	3	2	0	4	
23	Linear System Theory	3	2	0	4	
24	Soft Computing Technique and its Application in Engineering	3	0	2	4	
25	Recent topics in Modern Communication Engineering	3	2	0	4	