

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Communication Systems Engineering

PROPOSED TEACHING SCHEME

Semester I

SR. NO.	SUBJECT	TEACHING SCHEME(HOURS)			CREDITS
		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 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	
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

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Interdisciplinary Elective - 1

Image Processing

Interdisciplinary Elective - 2

Introduction to Artificial Intelligence

SR. NO.	List of Major Elective	TEACHING SCHEME(HOURS)			CREDITS
		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