

**13. Courses of Study and Scheme of Assessment
ME COMMUNICATION SYSTEMS**

**(2021 REGULATIONS)
(Minimum No. of credits to be earned:70*)**

Course Code	Course Title	Hours / Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
I SEMESTER									
21LC01	Linear Algebra and Optimization	3	1	0	4	50	50	100	PC
21LC02	Random Signal Processing	3	1	0	4	50	50	100	PC
21LC03	Digital Communication Systems	3	1	0	4	50	50	100	PC
21LC04	Communication Networks	3	0	0	3	50	50	100	PC
21LC05	RF circuit Design	3	0	0	3	50	50	100	PC
21LC06	Research Methodology and IPR	2	0	0	2	50	50	100	RMC
21LC72	Audit Course – I	2	0	0	Grade	100	0	100	MC
21LC51	Communication Networks Laboratory	0	0	4	2	50	50	100	PC
21LC52	RF Circuit Design Laboratory	0	0	4	2	50	50	100	PC
Total 30hrs		19	3	8	24	500	400	900	
II SEMESTER									
21LC07	Wireless communication Systems	3	0	0	3	50	50	100	PC
21LC08	Advanced Digital signal Processing	3	1	0	4	50	50	100	PC
21LC__	Professional Elective – I	3	0	0	3	50	50	100	PE
21LC__	Professional Elective – II	3	0	0	3	50	50	100	PE
21LC__	Professional Elective – III	3	0	0	3	50	50	100	PE
21LC82	Audit Course – II	2	0	0	Grade	100	0	100	MC
21LC61	Wireless communication systems Laboratory	0	0	4	2	50	50	100	PC
21LC62	Embedded System Design Laboratory	0	0	4	2	50	50	100	PC
21LC63	Industrial visit and Technical Seminar	0	0	4	2	50	50	100	EEC
Total 30hrs		17	1	12	22	500	400	900	
III SEMESTER									
21LC__	Professional Elective – IV	3	0	0	3	50	50	100	PE
21____	Open Elective	3	0	0	3	50	50	100	OE
21LC71	Project Work - I	0	0	12	6	50	50	100	EEC
Total 12hrs		6	0	12	12	150	150	300	
IV SEMESTER									
21LC81	Project Work - II	0	0	24	12	50	50	100	EEC
Total 24 hrs		0	0	24	12	50	50	100	
PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)									
Signal Processing									
21LC21	Multimedia Compression Techniques	3	0	0	3	50	50	100	PE
21LC22	Adaptive Signal Processing	3	0	0	3	50	50	100	PE
21LC23	Digital Image & Video Processing	3	0	0	3	50	50	100	PE
21LC24	Wavelets and Subband Coding	3	0	0	3	50	50	100	PE

Communications									
21LC25	Free Space Optics	3	0	0	3	50	50	100	PE
21LC26	Cooperative Communication	3	0	0	3	50	50	100	PE
21LC27	Cognitive Radio	3	0	0	3	50	50	100	PE
RF									
21LC28	EMI and EMC	3	0	0	3	50	50	100	PE
21LC29	Radiating systems	3	0	0	3	50	50	100	PE
21LC30	Computational Electromagnetics	3	0	0	3	50	50	100	PE
Networks									
21LC31	Wireless Network Security	3	0	0	3	50	50	100	PE
21LC32	Vehicular systems and Networks	3	0	0	3	50	50	100	PE
21LC33	Optical Networks	3	0	0	3	50	50	100	PE
21LC34	Communication Protocols for IoT	3	0	0	3	50	50	100	PE
VLSI									
21LC35	System on Chip Design	3	0	0	3	50	50	100	PE
21LC36	Communication Algorithms on FPGA	3	0	0	3	50	50	100	PE
Technical Programming									
21LC37	Machine Learning and Deep Learning	3	0	0	3	50	50	100	PE
21LC38	Data Structures and Algorithms	3	0	0	3	50	50	100	PE
21LC39	Python Programming	3	0	0	3	50	50	100	PE
Communication Technology									
21LC40	Space Time Wireless Communication	3	0	0	3	50	50	100	PE
21LC41	5G Wireless Technologies	3	0	0	3	50	50	100	PE
Open Electives (One to be opted)									
21LC91	Smart Cities	3	0	0	3	50	50	100	OE
21LC92	Radiation Hazards	3	0	0	3	50	50	100	OE

* Indicated is the minimum number of credits to be earned by a student.

CAT – Category; PC – Professional Core; PE - Professional Elective; RMC - Research Methodology and IPR; EEC – Employability Enhancement Course; MC - Mandatory Course; Grade – Completed / Not completed; OE – Open Elective.