

I M.TECH. ELECTRONICS AND COMMUNICATIONS ENGINEERING

SEMESTER - I

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	MA65014	Linear Algebra, Probability theory and Optimization	3	1	0	4	0	70	30	0	0	100
2	EC65015	Wireless and Mobile Communication	3	0	0	3	0	70	30	0	0	100
3	EC65016	Modern Communication Networks	3	0	0	3	0	70	30	0	0	100
4	ELECTIVE I		3	0	0	3	0	70	30	0	0	100
5	ELECTIVE II		3	0	0	3	0	70	30	0	0	100
6	EC65455	Lab.- I : Advanced Communication Lab	0	0	4	0	2	0	0	40	60	100
7	EC65456	Lab.- II : Network Design and Simulation Lab	0	0	4	0	2	0	0	40	60	100
8	EC65499	Comprehensive Viva	0	0	0	0	0	0	0	0	Grade	Grade
Total			15	1	8	16	4	350	150	80	120	700

SEMESTER - II

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	EC65514	SDR and Cognitive Radio	3	0	0	3	0	70	30	0	0	100
2	EC65515	Advanced Antenna Theory & Design	3	0	0	3	0	70	30	0	0	100
3	EC65516	Internet of Things	3	0	0	3	0	70	30	0	0	100
4	ELECTIVE III		3	0	0	3	0	70	30	0	0	100
5	ELECTIVE IV		3	0	0	3	0	70	30	0	0	100
6	EC65855	Lab.- III : Sensor Networks and IoT Lab	0	0	2	0	1	0	0	40	60	100
7	EC65856	Lab.- IV : Antenna Testing and Measurement Lab	0	0	4	0	2	0	0	40	60	100
8	EC65883	Minor Project / Seminar	0	0	2	0	1	0	0	100	0	100
9	EC65899	Comprehensive Viva	0	0	0	0	0	0	0	0	Grade	Grade
Total			15	0	8	15	4	350	150	180	120	800

List of Electives

Elective I		Semester I
S.No	Sub. Code	Subject
1	EC65215	Information Theory and Coding
2	IT65216	Artificial Intelligence and Machine Learning

Elective II		Semester I
S.No	Sub. Code	Subject
1	EC65316	Voice and data networks
2	EC65317	Game Theory in Wireless Communication
3	EC65318	Advanced digital signal processing

Elective III		Semester II
S.No	Sub. Code	Subject
1	EC65717	Embedded Systems
2	EC65718	Optical Networks

Elective IV		Semester II
S.No	Sub. Code	Subject
1	EC65768	Cryptography & E-Security
2	EC65769	Markov chains and Queuing theory

SEMESTER - III

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	EC65931	*Industrial Training/Term Paper/Seminar-II	0	0	8	0	4	0	0	50	0	50
2	EC65932	Dissertation Phase - I	0	0	20	0	10	0	0	40	60	100
3	MA65902	**Research Methodology & IPR	2	0	0	2	0	70	30	0	0	100
TOTAL			2	0	28	2	14	70	30	90	60	250

*Industrial Training to be carried out between II and III Semester during vacation

** This course can be studied online with prior permission of HOD, however, end semester examination will be conducted in the Institute.

SEMESTER - IV

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	EC65952	Dissertation Phase-II	0	0	32	0	16	0	0	80	120	200
TOTAL			0	0	32	0	16	0	0	80	120	200