

B.E. ELECTRONICS AND COMMUNICATION ENGINEERING**Regulation 2019 Revised****Semester I**

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
		Induction Programme	-	-	-	-	-	-
1	R19MA101	Matrix Algebra and Calculus	BS	4	3	1	0	4
2	R19CS101	Problem Solving using C	ES	3	3	0	0	3
3	R19CS104	Application Design and Development	ES	4	2	2	0	4
4	R19PH102	Semiconductor Physics	BS	3	3	0	0	3
THEORY CUM PRACTICAL								
5	R19HS101	Technical English	HS	4	2	0	2	3
PRACTICAL								
6	R19PH111	Semiconductor Physics Laboratory	BS	2	0	0	2	1
7	R19CS111	Problem solving using C Laboratory	ES	4	0	0	4	2
8	R19GE111	Engineering Practices Laboratory	ES	4	0	0	4	2
PROFESSIONAL DEVELOPMENT								
9	R19EM101	Soft Skills	EM	2	0	0	2	1
TOTAL				30	13	3	14	23

Semester II

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19HS11X	Language Elective	HS	3	3	0	0	3
2	R19MA102	Advanced Calculus and Complex Variables	BS	4	3	1	0	4
3	R19CY101	Engineering Chemistry	BS	3	3	0	0	3
4	R19EC101	Circuit Analysis	ES	4	3	1	0	4
5	R19CS201	Data Structures	ES	3	3	0	0	3
THEORY CUM PRACTICAL								
6	R19CS112	Python Programming	ES	5	3	0	2	4
PRACTICAL								
7	R19CY111	Engineering Chemistry Laboratory	BS	2	0	0	2	1
8	R19CS211	Data Structures Laboratory	ES	4	0	0	4	2
9	R19EC111	Electric Circuits and Devices Laboratory	ES	2	0	0	2	1
10	R19MC101	தமிழர்மரபு / Heritage of Tamils	HSMC	1	1	0	0	1
TOTAL				31	19	2	10	26

Semester III

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19MA202	Linear Algebra and Partial Differential Equations	BS	4	3	1	0	4
2	R19CS203	Object Oriented Programming using Java	ES	3	3	0	0	3
3	R19EC201	Analog Electronic Circuits	PC	3	3	0	0	3
4	R19EC202	Digital System Design	PC	3	3	0	0	3
5	R19EC203	Electromagnetic Fields	PC	3	3	0	0	3
6	R19XX6XX	Open Elective I *	OE	3	3	0	0	3
PRACTICAL								
7	R19CS213	Object Oriented Programming using Java Laboratory	ES	2	0	0	2	1
8	R19EC211	Analog Electronics Laboratory	PC	2	0	0	2	1
9	R19EC212	Digital System Design Laboratory	PC	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
10	R19EM201	Logical Thinking	EM	2	0	0	2	1
MANDATORY COURSE								
11	R19MC101	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	HSMC	1	1	0	0	1
TOTAL				28	19	1	8	24

Semester IV

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19MA206	Probability and Statistics	BS	4	3	1	0	4
2	R19CS207	Algorithmic Design Techniques	ES	3	3	0	0	3
3	R19EC204	Analog and Digital Communication	PC	3	3	0	0	3
4	R19EC205	Microprocessor and Embedded Systems	PC	3	3	0	0	3
5	R19XX6XX	Open Elective II *	OE	3	3	0	0	3
THEORY CUM PRACTICAL								
6	R19EC251	Signals and Systems	PC	5	3	0	2	4
PRACTICAL								
7	R19EC213	Communication Systems Laboratory	PC	2	0	0	2	1
8	R19EC214	Microprocessor and Embedded Systems Laboratory	PC	2	0	0	2	1
9	R19CS217	Algorithmic Design Techniques Laboratory	ES	2	0	0	2	1
10	R19EC281	Project using Design Thinking (Product / Software Development Life Cycle)	PW	2	0	0	2	1
PROFESSIONAL DEVELOPMENT								
11	R19EM202	Advanced Logical Thinking	EM	2	0	0	2	1
	R19EM203	Summer Internship	EM	-	-	-	-	-
MANDATORY COURSE								
	R19MC201	Environmental Science	MC	1	1	0	0	-
TOTAL				32	19	1	12	25

* Open Elective –LTPC for Open Electives can either be 3 0 0 3 or 2 0 2 3

Semester V

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19EC301	Internet of Things	PC	3	3	0	0	3
2	R19EC302	VLSI Design	PC	3	3	0	0	3
3	R19EC303	Control System Engineering	PC	4	3	1	0	4
4	R19EC5XX	Professional Elective I*	PE	3	3	0	0	3
THOERY CUM PRACTICAL								
5	R19EC351	Digital Signal Processing	PC	5	3	0	2	4
PRACTICAL								
6	R19EC311	Internet of Things Laboratory	PC	2	0	0	2	1
7	R19EC312	VLSI Design Laboratory	PC	2	0	0	2	1
MANDATORY COURSE								
	R19MC202	Indian Constitution and Tradition	MC	1	1	0	0	-
TOTAL				23	16	1	6	19

Semester VI

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19EC304	Antenna and Wave Propagation	PC	3	3	0	0	3
2	R19EC305	Networks and Security	PC	3	3	0	0	3
3	R19	Artificial Intelligence and Machine Learning	PC	3	3	0	0	3
4	R19EC5XX	Professional Elective II*	PE	3	3	0	0	3
5	R19EC5XX	Professional Elective III*	PE	3	3	0	0	3
PRACTICAL								
6	R19EC313	Networks and Security Laboratory	PC	2	0	0	2	1
7	R19AIXXX	Artificial Intelligence and Machine Learning Laboratory	PC	2	0	0	2	1
PROJECT WORK								
8	R19EC381	Innovative / Multi-Disciplinary Project	PW	2	0	0	2	1
TOTAL				21	15	0	6	18

*Professional Elective –LTP C for Professional Electives can either be 3 0 0 3 or 2 0 2 3

Semester VII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19HS401	Principles of Management and Professional Ethics	HS	3	3	0	0	3
2	R19EC401	Wireless Communication	PC	3	3	0	0	3
3	R19EC5XX	Professional Elective IV*	PE	3	3	0	0	3
THEORY CUM PRACTICAL								
4	R19EC451	Microwave and Optical Communication	PC	5	3	0	2	4
PROJECT WORK								
5	R19EC481	Project work – Phase I	PW	6	0	0	6	3
TOTAL				20	12	0	8	16

*Professional Elective –LTP C for Professional Electives can either be 3 0 0 3 or 2 0 2 3

Semester VIII

Sl. No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	R19XX6XX	Open Elective III*	OE	3	3	0	0	3
PROJECT WORK								
2	R19EC482	Project Work – Phase II	PW	16	0	0	16	8
TOTAL				19	3	0	16	11

* Open Elective –LTPC for Open Electives can either be 3 0 0 3 or 2 0 2 3

Total Number of Credits: 162

CREDIT SUMMARY

Sl. No.	Course Category	Credits per Semester								Credits	R2019 Credit %
		I	II	III	IV	V	VI	VII	VIII		
1	HS	3	3	-	-	-	-	3	-	9	5.6%
2	BS	8	8	4	4	-	-	-	-	24	14.8%
3	ES	11	14	4	4	-	-	-	-	33	20.4%
4	PC	-	-	11	12	16	11	7	-	57	35.2%
5	PE	-	-	-	-	3	6	3	-	12	7.4%
6	OE	-	-	3	3	-	-	-	3	9	5.6%
7	PW	-	-	-	1	-	1	3	8	13	8.0%
8	EM	1	-	1	1	-	-	-	-	3	1.9%
9	MC	-	1	1	-	-	-	-	-	2	1.2%
Total		23	26	24	25	19	18	16	11	162	100