ECE (B.Tech.-M.Tech)

1st Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	PH111	Classical Physics	BSC	3	1	0	4
2	MT111	Calculus and Ordinary Differential Equations	BSC	3	1	0	4
3	EC111	Basic Electronics	ESC	3	1	0	4
4	EC111L	Basic Electronics Lab	ESC	0	0	3	1.5
5	CS111	Programming for Problem Solving	ESC	3	0	3	4.5
6	HS111	Technical Communication in English	HSMC	2	0	2	3
7	HS112	Indian Knowledge System	MC	1	0	0	1
		A 3-week Mandatory Induction Program					
						Total Credits	**22**

2nd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS121	Human Values and Ethics	HSMC	3	0	0	3
2	ME121	Environmental Science	MC	1	0	0	1
3	MT121	Linear Algebra and Complex Analysis	BSC	3	1	0	4
4	CS121	Data Structures and Algorithms	ESC	3	0	3	4.5
5	PH121L	UG Physics Laboratory	BSC	0	0	3	1.5
6	CS122	Introduction to Scripting Languages	ESC	0	0	2	1
7	EC121	Semiconductor Devices and Circuits	PC	3	0	0	3
8	EC122	Analog Electronics	PC	3	0	0	3
9	EC122L	Analog Electronics Lab	PC	0	0	3	1.5
						Total Credits	**22.5**

Summer Term

Exit option with UG Certificate by Completing 40 credits from 2 semesters and additional 6 credits from an Internship or skill based courses in the summer term

3rd Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	MT211	Probability and Statistics	PC	3	1	0	4
2	EC211	Signals and Systems	PC	3	0	0	3
3	EC211L	Signals and Systems Lab	PC	0	0	3	1.5
4	EC213	Digital Circuit and Systems	PC	3	0	0	3
5	EC213L	Digital Circuit and Systems Lab	PC	0	0	3	1.5
6	EC214	Engineering Electromagnetics	PC	3	0	0	3
7	EC215	Microprocessor and Microcontroller	PC	3	0	0	3
8	EC215L	Microprocessor and Microcontroller Lab	PC	0	0	3	1.5
9	EC216	Network Analysis and Synthesis	PC	3	0	0	3
						Total Credits	**23.5**

4th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	EC221	Analog and Digital Communication	PC	3	0	0	3
3	EC221L	Analog and Digital Communication Lab	PC	0	0	3	1.5
4	EC222	Fundamentals of VLSI	PC	3	0	0	3
5	EC222L	VLSI Lab	PC	0	0	3	1.5
6	EC223	Microwave Engineering	PC	3	0	0	3
7	EC223L	Microwave Engineering Lab	PC	0	0	3	1.5
8	EC224L	Design and Project Lab	PC	0	0	3	1.5
9	CC223	Introduction to AI and ML	PC	3	0	2	4
						Total Credits	**20**

Summer Term

Exit option with UG Diploma by Completing 80 credits from 4 semesters and additional 6 credits from an Internship or skill based courses in the summer term

5th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN311/LN312	Summer Internship/Mini Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	EC311	Wireless Communication	PC	3	0	0	3
4	EC311L	Wireless Communication lab	PC	0	0	3	1.5
5	EC312	Control System Engineering	PC	3	0	2	4
6	EC313	Digital Signal Processing	PC	3	0	0	3
7	EC313L	Digital Signal Processing Lab	PC	0	0	3	1.5
8		Program Elective 1	PE	3	0	0	3
						Total Credits	**23**

6th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS321	Introduction to Economics	HSMC	3	0	0	3
2	EC321	5G Wireless Systems and beyond	PC	3	0	0	3
3	CC221	Computer Communication Networks	PC	3	0	2	4
4		Program Elective 2	PE	3	0	0	3
5		Program Elective 3	PE	3	0	0	3
6		Open Elective 1	OE	3	0	0	3
7							
						Total Credits	**19**

Summer Term

Exit option with B.Sc. by Completing 120 credits from 6 semesters and addional 6 credits from an Internship or skill based courses in the summer term

7th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN412	Thesis	Project	0	0	8	4
2		Program Elective 4	PE	3	0	0	3
3		Program Elective 5	PE	3	0	0	3
4		Program Elective 6	PE	3	0	0	3
5		Open Elective 2	OE	3	0	0	3
6		Open Elective 3	OE	3	0	0	3
						Total Credits	**19**

8th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN425	Thesis	Project	0	0	8	4
2	LN322	Seminar and Presentation Skills	Project	0	0	2	1
3		Program Elective 7	PE	3	0	0	3
4		Program Elective 8	PE	3	0	0	3
5		Open Elective 4	OE	3	0	0	3
6		Open Elective 5	OE	3	0	0	3
						Total Credits	**17**

9th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	LN511	Thesis	Project	0	0	24	12
2		Program Elective 9	PE	3	0	0	3
3		Program Elective 10	PE	3	0	0	3
		Total Credits					**18**

		10th Semester:					
S. No.	**CCODE**	**Course Name**	**Type**	**L**	**T**	**P**	**Credits**
Option 1	LN521	Thesis	Project	0	0	24	12
Option 2	LN522	Internship	Project	0	0	24	12
		Total Credits					**12**

Total Curriculum Credits	**196**