CSE (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	CS123	Digital Systems	PC	3	0	2	4
8	CS124	Discrete Mathematics	PC	3	0	0	3
				Total Credits			**22**

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	BSC	3	1	0	4
2	EC211	Signals and Systems	ESC	3	0	0	3
3	CS211	Computer Organization and Architecture	PC	3	0	2	4
4	CS213	Database Management Systems	PC	3	0	2	4
5	CS214	Object Oriented Programming	PC	3	0	2	4
6	CS215	Design and Analysis of Algorithms	PC	3	0	2	4
7							
8							
				Total Credits			**23**

4th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS221	Constitutional Studies	MC	1	0	0	1
2	HS222	Principles of Management	HSMC	3	0	0	3
3	CS221	Web Programming	PC	0	0	2	1
4	CS222	Theory of Computation	PC	3	0	0	3
5	CS223	Operating Systems	PC	3	0	2	4
6	CS224	Computer Networks	PC	3	0	2	4
7	CS225	Data Science	PC	3	0	0	3
8		Program Elective 1	PE	3	0	0	3
				Total Credits			**22**

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/Project	Project	0	0	8	4
2	HS311	Psychology, Technology & Society	HSMC	3	0	0	3
3	CS311	Software Engineering	PC	3	0	0	3
4	CS312	Artificial Intelligence	PC	3	0	2	4
5	CS313	Computer System Security	PC	3	0	2	4
6	CS314	Software Development Lab	PC	0	0	2	1
7		Program Elective 2	PE	3	0	0	3
8							
					Total Credits		22

6th Semester:

S. No.	CCODE	Course Name	Type	L	T	P	Credits
1	HS321	Introduction to Economics	HSMC	3	0	0	3
2	MT321	Numerical Analysis and Scientific Computing	BSC	3	1	0	4
3		Program Elective 3	PE	3	0	0	3
4		Program Elective 4	PE	3	0	0	3
5		Open Elective 1	OE	3	0	0	3
					Total Credits		16

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	CS511	Advanced Data Structures	PC	3	0	2	4
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
		Open Elective 3	OE	3	0	0	3
					Total Credits		20

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	CS521	Advanced Algorithms	PC	3	0	2	4
4		Program Elective 7	PE	3	0	0	3
5		Program Elective 8	PE	3	0	0	3
		Open Elective 4	OE	3	0	0	3
		Total Credits					18

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
4		Open Elective 5	OE	3	0	0	3
		Total Credits					21

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	**198**