

	Semester	Type	Course Code	Course Name	L	T	P	C
				First Semester				
1	I	IC	ICxxx	Calculus	1.5	0.5	0	2
2	I	IC	ICxxx	Complex and Vector Calculus	1.5	0.5	0	2
3	I	IC	IC140	Engineering Graphics for Design	2	0	3	4
4	I	IC	IC152	Introduction to Python and Data Science	3	0	2	4
5	I	IC	ICXXX	IC Core basket – 1	2.5/3	0.5/0	0	3
6	I	HSS	HSXXX	HSS Course	3	0	0	3
7	I	IKS	IKS181	Ikshma Course	3	0	0	3
8			ICXXX	Foundations of Design Practicum	1	0	6	4
				Second Semester				
1	II	IC	ICxxx	Linear Algebra	1.5	0.5	0	2
2	II	IC	ICxxx	ODE & Integral Transforms	2.5	0.5	0	3
3	II	IC	IC161	Applied Electronics	3	0	0	3
4	II	IC	IC 161P	Applied Electronics Lab	0	0	3	2
5	II	IC	IC252	Probability and Statistics	3	0	2	4
6	II	IC	ICXXX	Programming and Data Structures	2.5/3	0.5/0	0	3
7	II	IC	ICXXX	Foundations of Design Practicum	1	0	6	4
8	II	IC	IC221P	Physics Practicum	3	0	0	3

9	II	IC	IKS	Iksmha courses				
				Third Semester				
1	III	IC	IC272	Machine Learning	3	0	0	3
2	III	IC	IC	Data Structures and Algorithms	0	0	2	1
3	III	DC	DS301	Mathematical Foundations of Data Science	3	1	0	4
4	III	DC	DS201	Data handling and visualization	2	0	2	3
5	III	DE	CS214	Computer Organization	3	0	2	4
6	III	HSS	HSXXX	HSS Course	x	x	x	3
				Fourth Semester				
1	IV	IC	IC201P	Design Practicum	0	0	6	3
2	IV	DC	DS411	Optimization for Data Science	3	1	0	4
3	IV	DC	DS313	Statistical Foundations of Data Science	3	1	0	4
4	IV	DC	DS412	Matrix Computations for Data Science	3	0	2	4
5	IV	DE	DE-1	Discipline Elective-1	3	0	0	3
				Fifth Semester				
1	V	DC	DS413	Introduction to Statistical Learning	3	0	2	4
3	V	DC	CSXXX	Artificial Intelligence	3	0	0	3
4	V	DE	DE-2	Discipline Elective-2	x	x	x	4
	V	DE	DE-4	Discipline Elective-4	x	x	x	4
5	V	FE	FE-1	Free Elective-1	x	x	x	4
				Sixth Semester				

1	VI	DC	DS404	Information Security and Privacy	3	0	0	3
	V	DC	DS302	Computing Systems for Data Processing	3	0	2	4
2	VI	DE	DE-3	Discipline Elective-3	x	x	x	4
3	VI	DE	DE-4	Discipline Elective-4	x	x	x	4
4	VI	FE	FE-2	Free Elective-2	x	x	x	3
5	VI	FE	FE-3	Free Elective-3	x	x	x	3
	VI	ISTP	ISTP	ISTP/Free elective	x	x	x	4
				Seventh Semester				
1	VI/VII	IC	IC010	Internship	x	x	x	2
1	VII	DE	DE-5	Discipline Elective-5	x	x	x	4
2	VII	DE	DE-6	Discipline Elective-6	x	x	x	4
3	VII	FE	FE-4	Free Elective-4	x	x	x	4
4	VII	FE	FE-5	Free Elective-5	x	x	x	4
5	VII	MTP-1	MTP-1	MTP-1	x	x	x	3
				Eighth Semester				
1	VIII	DE	DE-7	Discipline Elective-7	x	x	x	4
2	VIII	DE	DE-8	Discipline Elective-8	x	x	x	4
3	VIII	FE	FE-6	Free Elective-6	x	x	x	4
5	VIII	MTP 2	MTP-2	MTP-2	x	x	x	5