B. Tech (M & C) – 2017 Batch

Semester I

Course No.	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 1110	Calculus I	1						
MA 1220	Calculus II	2						
MA 1500	Math Foundation	1						
MA 1501	Introduction to Number System	1						
CS 1310	Discrete Structures I	2						
ID 1054	Digital Fabrication	2						
ID 1035	Independent Project	1						
ID 1303	Introduction to Programming	2						
ID 1330	Applied Logic Digital Design	1						
PH /CY	Science Elective	1						
LA/CA	Electives	1						
	Total	15						

Semester II

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA1130	Vector Calculus	1						
MA1140	Linear Algebra	1						
MA1150	Differential Equations	1						
EE1510	Matrix Analysis	1						
EE1330	Digital Signal Processing	1						
CS 1340	Discrete Structures II	2						
CS1353	Introduction to Data Structures	3						
PH /CY	Science Elective	3						
LAXXX	LA / CA Electives	2						
FEXXX	Free Elective	1						
	Total	**16**						

	Semester								Total
	1	2	3	4	5	6	7	8	
MA Core	5	3	5	8	3	6	3	0	**33**
MA Elec	0	0	1	0	9	6	6	9	**31**
CS	2	5	7	6	2	0	0	0	**22**
EE	1	2	1	2	0	0	0	0	**5**
LA/CA	1	2	0	0	0	1	3	3	**10**
FE	0	1	0	0	2	3	3	3	**12**
Sci Elec	1	3	0	0	0	0	0	0	**4**
ID	5	0	1	1	0	0	0	0	**8**
Total	**15**	**16**	**15**	**17**	**16**	**16**	**15**	**15**	**125**

Semester III

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 2110	Probability	1						
MA 2120	Transforms	1						
MA 4020	Linear Algebra	3						
MnC ****	Dept Elective-I	1						
CS 2233	Data Structures	3						
CS 2323	Computer Architecture	2						
CS 2400	Principles of Programming Languages I	1						
CS 3510	OS-I	1						
EE 2230	Random Processes	1						
ID 1350	IoT	1						
	Total	15						

Semester IV

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 2130	Complex Variables	1						
MA 2140	Statistics	1						
MA 5060	Numerical Analysis	3						
MA 2150	Convex Optimization	3						
CS 2443	Algorithms	3						
CS 2410	Theory of Computation	2						
CS 2420	Intro to Complexity Theory	1						
EE2340	Information Sciences	1						
EE1210	Basic Control Theory	1						
ID ****	AI	1						
	Total	17						

Semester V

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 4010	Analysis of Functions of Single Variable	3						
MnC ****	Dept Electives - II	9						
CS 3550	DBMs-I	1						
CS 3530	Computer Networks-I	1						
FE ****	Free Elective	2						
	Total	16						

Semester VI

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 4070	Groups and Rings	3						
MA 4090	Analysis of Functions of Several Variables	3						
MnC ****	Dept Electives - III	6						
FE	Free Elective	3						
LA/CA	Professional Ethics	1						
	Total	16						

Semester VII

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MA 5020	Functional Analysis	3						
MnC ****	Dept Electives - IV	6						
FE ****	Free Elective	3						
LA/CA	Electives	3						
	Total	15						

Semester VIII

Course No	Course Name	Credits	Segments					
			1	2	3	4	5	6
MnC ****	Dept Electives - V	9						
LA/CA	Elective	3						
FE	Free Electives	3						
	Total	15						

S. No	Baskets
1	Theoretical Maths
2	Computational Mechanics
3	Coding and Cryptography
4	Computational Intelligence
5	Computing Labs