

B.Tech Mathematics and Computing Curriculum (2023)

Semester	OldCourseCode	CourseCode	NewCourseCode	CourseName	Credits	CourseBasket
			Semester 1	B.Tech Mathematics and Computing.-2023		
1	BT1010	BT1010	BT10010	Introduction to Life Sciences	1	BS
1	CY1010	CY1010	CY10010	Environmental Chemistry	2	BS
1	EP1108	EP1108	EP11010	Modern Physics	2	BS
1	ID1063	ID1063	ID10063	Introduction to Programming	3	BE
1	MA1000	MA1000	MA10050	Math Foundation	3	DC
1	MA1110	MA1110	MA10010	Calculus-I	1	BS
1	MA1130	MA1130	MA10040	Vector Calculus	1	DC
1	MA1220	MA1220	MA10020	Calculus-II	1	BS
1	MA1240	MA1240	MA10030	Combinatorics	3	DC
1			Semester 2	Semester Credits	17	
2	AI1100	AI1100	AI10000	Artificial Intelligence	1	BE
2	EM3020	EM3020	EM30020	Introduction to Entrepreneurship	1	LA
2	EP1031	EP1031	EP12011	Physics Lab	2	BS
2	MA1140	MA1140	MA10060	Elementary Linear Algebra	1	BS
2	MA1150	MA1150	MA10070	Differential Equations	1	BS
2	MA1230	MA1230	MA10080	Series of Functions	1	DC
2	MA1250	MA1250	MA10090	Introduction to Number Theory	3	DC
2	LAxxxx	LAxxxx	LAxxxx	Liberal Arts Elective	3	LA
2	XXxxxx	XXxxxx	XXxxxx	Basic Sciences	3	BS
2			Semester 3	Semester Credits	16	
3	EE1202	EE1202	EE11000	Digital Circuits	3	BE
3	ID2230	ID2230	ID20230	Data Structures & Applications	3	BE
3	LA1760	LA1760	LA10760	Communication Skills	2	LA
3	MA2120	MA2120	MA20020	Transform Techniques	1	DC
3	MA2150	MA2150	MA20030	Introduction to Metric Spaces	1	DC
3	MA2233	MA2233	MA20013	Data Structures and Applications Lab	3	DC
3	MA4040	MA2540	MA20040	Probability Theory	3	DC
3	MA4020	MA2550	MA20010	Linear Algebra	3	DC
3			Semester 4	Semester Credits	19	
4	CS2030	CS2030	CS20030	Theory of Computation	3	DC
4	CS2443	CS2443	CS20443	Algorithms	3	DC
4	CS3320	CS3320	CS30320	Compilers-I	1	BE
4	MA4030	MA2030	MA20060	Ordinary Differential Equations	3	DC
4	MA2070	MA2070	MA20050	Introduction to Group Theory	1	DC
4	MA2101	MA2101	MA20023	Convex Optimization	3	DC
4	MA2130	MA2130	MA20070	Complex Variables	1	DC
4	MA4240	MA2570	MA20090	Applied Statistics	3	DC
4			Semester 5	Semester Credits	18	
5	CS3510	CS3510	CS30510	Operating Systems I	1	BE
5	CS3550	CS3550	CS30550	Database Management Systems 1	1	BE
5	EE3900	EE3900	EE13020	Linear Systems and Signal Processing	3	BE
5	NULL	MA3060	MA30010	Numerical Analysis	3	DC
5	MA4010	MA4010	MA40020	Analysis of Functions of Single Variables	3	DC
5	MA4070	MA4070	MA40050	Elements of Groups and Rings	3	DC
5	FExxxx	FExxxx	FExxxx	Free Elective	3	FE
5			Semester 6	Semester Credits	17	
6	MA4090	MA4090	MA40080	Multivariable Calculus	3	FE
6	FExxxx	FExxxx	FExxxx	Free Elective	3	FE
6	MAxxxx	MAxxxx	MAxxxx	Departmental Elective	6	DE
6	LAxxxx	LAxxxx	LAxxxx	Liberal Arts Elective	2	LA
6			Semester 7	Semester Credits	14	
7	LA1770	LA1770	LA10770	Personality Development	1	LA

7	MA5020	MA5020	MA40120	Functional Analysis	3	DC
7	MAxxxx	MAxxxx	MAxxxx	Departmental Elective	9	DE
7	FExxxx	FExxxx	FExxxx	Free Elective	3	FE
7			Semester 8	Semester Credits	16	
8	FExxxx	FExxxx	FExxxx	Free Elective	3	FE
8	MAxxxx	MAxxxx	MAxxxx	Departmental Elective	9	DE
8				Semester Credits	12	
				Overall Credits	129	