

Mathematics and Computing

SEMESTER - I (Common for all B.Tech Courses)

S.No	C. Code	Course	L	T	P	C
1	MA108T	Calculus	3	1.5	0	9
2	PH101T	Quantum Physics and Applications	2	1	0	6
3	EE101T	Introduction to Electrical Systems and Electronic Circuits	3	0	0	6
4	ME101L	Hands on Engineering Laboratory	0	0	3	3
5	CS101C	Computer Programming	3	0	2	9
6	HS101T	Design Thinking and Creativity	1	0	0	PP/NP
7	NO	NSO/NSS/NCC/NCA	0	0	2	2
	Total Credits					35

Semester - II

S. No	Course Code	Course Name	L	T	P	C
1	MA109T	Linear Algebra and Differential Equations	3	1.5	0	9
2	CS101T	Data Structures and Algorithms	3	0	0	6
3	CS101L	Data Structures and Algorithms Laboratory	0	0	3	3
4	EE103T	Digital Systems				6
5	EE XXX	Digital Systems Lab				3
6	CS202T	Discrete Structures	3	0	0	6
7	CE301T	Environmental studies	3	0	0	6
8	NO	NSO/NSS/NCA/NCC	0	0	0	2
	Total Credits					39+2

Semester III

S.No	Course code	Course name	L	T	P	C
1	MA401T	Introduction to probability Theory	3	1.5	0	9
2	CS201T	Automata Theory	3	1.5	0	9
3	CS407T	Mathematics for Data Science				6
4	CS203T	Design and Analysis of Algorithms	3	0	0	6
5	CS201C	Software Systems Lab	2	0	2	6
Total credits						36

Semester IV

S.No	Course code	Course name	L	T	P	C
1	MA402T	Statistics	3	0	0	6
2	MA302T	Real Analysis	2	1	0	6
3	CS204T	Artificial Intelligence	3	0	0	6

4	CS201L	Artificial Intelligence Laboratory	0	0	3	3
5	CS301L	Computer Architecture Laboratory	0	0	3	3
6	CS302T	Computer Architecture	3	0	0	6
7	MA 210	Statistics	3	0	0	6
Total credits						36

Semester V

S.No	Course code	Course name	L	T	P	C
1	MA407T	Stochastic Models	3	0	0	6
2	MA404T	Introduction to Mathematical Finance I	3	0	0	6
3	CS403T	Introduction to Graph Theory	3	0	0	6
4		Elective				6
5		Elective				6
6	HS 201	Economics	3	0	0	6
Total credits						36

Semester VI

S.No	Course code	Course name	L	T	P	C
1	MA303T	Group Theory	3	1	0	6
2	MA408T	Introduction to Mathematical Finance 2	3	0	0	6
3	MA107T	Advanced Linear Algebra	3	1	0	6
4		Elective				6
5		Elective				6
	MA409T	numerical Linear Algebra	3	0	0	6
Total credits						36

Semester VII

S.No	Course Code	Course Name	L	T	P	C
1		Elective				6
2		Elective				6
3		Elective				6
4		Elective				6
Total credits						24

Semester VIII

S.No	Course Code	Course Name	L	T	P	C
1		Elective				6
2		Elective				6
3		Elective				6
Overall Credits Required (Minimum)						18

Overall Credits Required (Minimum)						262
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