

Computer Science and Engineering

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

S.No	C. Code	Course	L	T	P	C
1	MA 101	Calculus	3	1	0	8
2	PH 101	Quantum Physics and Applications	2	1	0	6
3	CH 102	Fundamental Concepts and Applications of Chemistry	3	0	0	6
4	BB 103	Introduction to Modern biology	3	0	0	6
5	PH 113	Hands on Science Laboratory - I	0	0	3	3
6	CS 101	Computer Programming	3	0	2	8
7	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
8	NO107/ NO105/ NO 106/ NO 108	NSO/NSS/NCC/NCA	0	0	2	2
First Semester Total Credits						37

Semester - II

S. No	Course Code	Course Name	L	T	P	C
1	MA 102	Linear Algebra (1st Half)	3	1	0	4
2	MA 103	Differential Equations - I (2nd Half)	3	1	0	4
3	ME 111	Engineering Graphics Laboratory	1	0	3	5
4	EE 101	Introduction to Electrical Systems and Electronics	3	0	0	6
5	CS 201	Data Structures and Algorithms	3	0	0	6
6	CS 211	Data Structures and Algorithms Laboratory	0	0	3	3
7	ME 113	Hands on Engineering Laboratory	0	0	3	3
8	PH 102	Electricity and magnetism	2	1	0	6
9	NO107/ NO105/ NO 106/ NO 108	NSO/NSS/NCC/NCA	1	0	0	2
Total Credits						37

Semester III

S.No	Course code	Course name	L	T	P	C
1	CS 205	Design and analysis of algorithms	3	0	0	6
2	CS 203	Discrete structures	3	0	0	6

3	EE 221	Introduction to Probability (1st Half)	3	0	0	3
4	EE 227	Data Analysis (2nd Half)	3	0	0	3
5	HS 201	Economics	3	0	0	6
6	CS 213	Software Systems Lab	1	3	0	8
Total credits						32

Semester IV

S.No	Course code	Course name	L	T	P	C
1	CS 202	Automata theory	3	1	0	8
2	CS 209	Artificial intelligence	3	0	0	6
3	CS 301	Computer Architecture	3	0	0	6
4	EE 204	Digital systems	3	0	0	6
5	EE 214	Digital Circuits Lab	3	0	0	3
6	CS 214	Artificial intelligence lab	0	0	3	3
7	CS 311	Computer Architecture lab	0	0	3	3
Total credits						35

Semester V

S.No	Course code	Course name	L	T	P	C
1	CS 304	Operating systems	3	0	0	6
2	CS 303	Databases and information systems	3	0	0	6
3		Elective I / R&D I#	3	0	0	6
4		Elective II	3	0	0	6
5		HSS Elective 1*	3	0	0	6
6	CS 314	Operating systems lab	0	0	3	3
7	CS 313	Databases and information systems laboratory	0	0	3	3
Total credits						36

Semester VI

S.No	Course code	Course name	L	T	P	C
1	CS 348	Computer networks	3	0	0	6
2	CS 323	Compilers	3	0	0	6
3	CS 316	Compilers lab	0	0	3	3
4	CS 315	Computer networks lab	0	0	3	3
5		HSS Elective II*	3	0	0	6
6	CE 301	Environmental studies	3	0	0	6

7		Elective III / R&D I/II#	3	0	0	6
Total credits						36

Semester VII

S.No	Course Code	Course Name	L	T	P	C
1		Elective IV				6
2		Elective V				6
3		Elective VI				6
		Elective VII / BTP#				6
Total credits						24

Semester VIII

S.No	Course Code	Course Name	L	T	P	C
1		Elective VIII				6
2		Elective IX				6
3		Elective X/ BTP#				6
Total credits						18

Overall Credits Required (Minimum)						255
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