

2022 - Computer Science and Engineering

Semester I						
S. No	Course Code	Course Name	L	T	P	C
1	CH 102	Fundamental concepts and applications of chemistry	3	0	0	6
2	MA 109	Calculus I (1st Half)	3	1	0	4
3	MA 121	Calculus II (2nd Half)	3	1	0	4
4	PH 101	Quantum Physics and Applications	2	1	0	6
5	BB 103	Introduction to Modern Biology	3	0	0	6
6	CS 103	Introduction to Programming - 1 (Using C) (1st Half)	3	0	2	4
7	EE 103	Introduction to Programming - 2 (Using Python) (2nd Half)	3	0	2	4
8	PH 113	Hands on Science Laboratory - I	0	0	3	3
9	HS 103	Introduction to Fine Arts				PP/NP
10	HS 106	Design Thinking and Creativity				PP/NP
11	NO 101/ NO 103	National Sports Organization (NSO)/National Service Scheme (NSS)				PP/NP
		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	NO 102/ NO 104	National Sports Organization (NSO)/National Service Scheme (NSS)				PP/NP
		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
	CS 405/	BTP 1/Elective VII				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	CS 409/	BTP/Elective X				6
Total credits						18
Overall Credits Required (Minimum)						255

	<p>* Students may be permitted to opt for HSS electives in the 7th and 8th Semester. Course adjustments and other related things need to be managed in consultation with the faculty advisor.</p> <p># RnD and BTP projects are NOT mandatory. These are just indicative slots where in RnD /BTP projects may be pursued.</p>					