

## 2022 - Engineering Physics

SEMESTER - I (Common for all B.Tech Courses)						
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-1 (1st Half)	3	1	0	4
3	MA 121	Calculus-2 (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)	3	0	2	4
7	EE 103	Introduction to Programming -2 (Python)	3	0	2	4
8	PH 113	Hand on science Laboratory-I	0	0	3	3
9	HS 103	Introduction to Fine Arts	0	0	1	PP/NP
10	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
11	NO101/NO103	NSO/NSS	0	0	1	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 Structure & Algorithms	3	0	0	6
6	CS 211	Data Structure & 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	NO102/ NO104	NSO/NSS	0	0	1	PP/NP
Total Credits						37

SEMESTER - III						
S. No	Course Code	Course Name	L	T	P	C
1	PH 201	Electrodynamics	2	1	0	6
2	ME 201	Engineering Mechanics	2	1	0	6
3	ME 207	Thermodynamics	2	1	0	6

4	EE 210	Signals and Systems	2	1	0	6
5	EE 221	Introduction to Probability (Pre mid-sem)	3	0	0	3
6	EE 229	Electronic Devices (Pre mid-sem)	3	0	0	3
7	EE 202	Introduction to Analog Circuits (Post midsem)	3	0	0	3
8	PH 211	Introductory Physics Laboratory	0	0	3	3
Total Credits						36

### SEMESTER - IV

S. No	Course Code	Course Name	L	T	P	C
1	PH 202	Classical Mechanics	2	1	0	6
2	PH 203	Quantum Mechanics-I	2	1	0	6
3	EE 204	Digital Systems	2	1	0	6
4	CS 301	Computer Architecture	2	1	0	6
5	EE 212	Devices and Circuits Laboratory	0	0	3	3
6	EE 214	Digital Circuits Laboratory	0	0	3	3
7	CS 311	Computer Architecture Lab	0	0	3	3
Total Credits						33

### SEMESTER - V

S. No	Course Code	Course Name	L	T	P	C
1	PH 304	Statistical Physics	2	1	0	6
2	PH 302	Quantum Mechanics - II	2	1	0	6
3	EE 321	Digital Signal Processing (Pre mid-sem)	3	0	0	3
4	EE 227	Data Analysis (Post mid-sem)	2	1	0	3
5	ME 203	Fluid Mechanics	2	1	0	6
6	EE 315	Digital Signal Processing Lab (Post mid-sem)	0	0	2	2
7	PH 212	General Physics Laboratory	0	0	3	3
8	HS 201	Economics	3	0	0	6
Total Credits						35

### SEMESTER - VI

S. No	Course Code	Course Name	L	T	P	C
1	PH 306	Condensed Matter Physics	2	1	0	6
2	CE 301	Environmental Studies	3	0	0	6
3		HSS Elective - I	3	0	0	6
4		Institute Elective – 1 / RnD Project	2	1	0	6

5	PH 311	Advanced Physics Laboratory	0	0	3	3
6	ME 331	Mechanics and Measurement Lab	1	0	3	5
7	PH 307	Seminar – 1	0	0	3	3
Total Credits						35

### SEMESTER - VII

S. No	Course Code	Course Name	L	T	P	C
1		HSS Elective - II	3	0	0	6
2		Seminar – 2	0	0	4	4
3		Institute Elective – 2	2	1	0	6
4		Institute Elective – 3/BTP-I	2	1	0	6
7	Total Credits					22

### SEMESTER -VIII

S. No	Course Code	Course Name	L	T	P	C
1		Institute Elective – 4	2	1	0	6
2		Institute Elective – 5	2	1	0	6
3		Institute Elective – 6/ BTP-II	2	1	0	6
Total Credits						18
<b>Overall Credits Required (Minimum)</b>			<b>253</b>			