

Engineering Physics

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	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 103	Computer Programming	3	0	2	8
7	HS 103	Introduction to Fine Arts	0	0	1	PP/NP
8	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
9	NO107/NO105	NSO/NSS	0	0	2	2
	First Semester Total Credits					39

Semester - II

Sl. No.	Course Code	Course Name	L	T	P	C
1	CS 201	Data Structure & Algorithms	3	0	0	6
2	EE 101	Introduction to Electrical Systems and Electronics	3	0	0	6
3	MA 102	Linear Algebra	3	1	0	4
4	MA 103	Differential Equations – I	3	1	0	4
5	PH 102	Electricity and Magnetism	2	1	0	6
6	ME 113	Hands on Engineering Laboratory	0	0	3	3
7	ME 111	Engineering Graphics Laboratory	1	0	3	5
8	CS 211	Data Structure & Algorithms Lab	0	0	3	3
9	NO107/NO105	NSO/NSS	0	0	2	2
	Second Semester Total Credits					39
	Total Cumulative Credits after 1st Year					78

Semester - III

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH 201	Electrodynamics	2	1	0	6
2	HS 201	Economics	2	1		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
	Third Semester Total Credits					36
	Second Year Total Credits					72

Semester - IV

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH 304	Statistical Physics	2	1	0	6
2	PH 312	General Physics Laboratory	0	0	3	3
3	EE 204	Digital Systems	2	1	0	6
4	CS 301	Computer Architecture	2	1	0	6
5	ME 201	Engineering Mechanics	2	1	0	6
6	EE 212	Devices and Circuits Laboratory	0	0	3	3
7	EE 214	Digital Circuits Laboratory	0	0	3	3
8	CS 311	Computer Architecture Lab	0	0	3	3
	Fourth Semester Total Credits					36

Semester - V

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH302T	Classical Mechanics	2	1	0	6
2	PH401T	Quantum Mechanics - II	2	1	0	6
3	EE305T	Digital Signal Processing (Pre mid-sem)	3	0	0	3
4	EE207T	Data Analysis (Post mid-sem)	2	1	0	3
5	ME208T	Fluid Mechanics	2	1	0	6
6	EE304L	Digital Signal Processing Lab (Post mid-sem)	0	0	2	2
7	PH401L	Advanced Physics Laboratory	0	0	3	3
	Fifth Semester Total Credits					29

Semester - VI

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH402T	Condensed Matter Physics	2	1	0	6
2	CE301T	Environmental Studies	3	0	0	6
3		HSS Elective - I	3	0	0	6
4	PH401T	Quantum Mechanics - II	2	1	0	6

5		Institute Elective – 1 / RnD Project	2	1	0	6
6	ME207L	Mechanics and Measurement Lab	1	0	3	5
7	PH401S	Seminar – 1	0	0	3	3
	Sixth Semester Total Credits					38
Semester- VII						
Sl. No.	Course Code	Course Name	L	T	P	C
1		HSS Elective - II	3	0	0	6
2	PH402S	Seminar – 2	0	0	3	3
3		Institute Elective – 2	2	1	0	6
4		Institute Elective – 3/ BTP-I	2	1	0	6
	Seventh Semester Total Credits					21
SEMESTER -VIII						
Sl. 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
	Eighth Semester Total Credits					18
	Overall Credits Required (Minimum)					256