

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 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						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/ NO 106/ NO 108	NSO/NSS/NCC/NCA	0	0	2	2
Second Semester Total Credits						39
Total Cumulative Credits after 1st Year						74

SEMESTER - III

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH302T	Classical Mechanics	2	1	0	6
2	PH303T	Quantum Mechanics - I	2	1	0	6
3	ME206T	Thermodynamics	2	1	0	6
4	EE204T	Signals and Systems	2	1	0	6
5	EE205T	Introduction to Probability (Pre mid-sem)	3	0	0	3
6	EE207T	Data Analysis (Post Mid Sem)	2	1	0	3
7	HS201T	Economics	2	1	0	6
8	PH201L	Introductory Physics Laboratory	0	0	3	3
Third Semester Total Credits						39
Second Year Total Credits						75

SEMESTER - IV

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH305T	Statistical Physics	2	1	0	6
2	EE103T	Digital Systems	2	1	0	6
3	CS302T	Computer Architecture	2	1	0	6
4	EE 229	Electronic Devices (Post Mid Sem)	3	0	0	3
5	ME201T	Engineering Mechanics	2	1	0	6
6	PH301L	General Physics Laboratory	0	0	3	3
7	EE101L	Digital Circuits Laboratory	0	0	3	3
8	CS301L	Computer Architecture Lab	0	0	3	3
Fourth Semester Total Credits						36
Total Cumulative Credits after 2nd Year						153

SEMESTER - V

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH301T	Electrodynamics	2	1	0	6
2	EE201T	Introduction to Analog Circuits (Pre mid Sem)	3	0	0	3
3	EE302C	Fundamentals of Digital Signal Processing	2	1	0	6
4	ME203T	Fluid Mechanics	2	1	0	6
5	EE201L	Devices and Circuits Laboratory	0	0	3	3
6	PH401L	Advanced Physics Laboratory	0	0	3	3
7						
Fifth Semester Total Credits						27
Third Year Total Credits						64

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		Institute Elective – 1 / RnD Project	2	1	0	6
5	PH401T	Quantum Mechanics - II	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
Total Cumulative Credits after 3rd Year						213

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)						257