

## Engineering Physics

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

S.No	C. Code	Course	L	T	P	C
1	MA108T	Calculus	3	1	0	9
2	PH101T	Quantum Physics and Applications	2	1	0	6
3	CY101T	Fundamental Concepts & Applications Of Chemistry	3	0	0	6
4	EE101T	Introduction to electrical systems and Electronics	3	0	0	6
5	PH101L	Hands on Science Laboratory - 1	0	0	3	3
6	CS101C	Computer Programming	3	0	3	9
7	HS101T	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						41

### SEMESTER - II

Sl. No.	Course Code	Course Name	L	T	P	C
1	CS101T	Data Structures and Algorithms	3	0	0	6
2	ME206T	Thermodynamics	3	0	0	6
3	MA109T	Linear Algebra and Differential Equations	3	1	0	9
4	PH102T	Electricity and Magnetism	2	1	0	6
5	ME101L	Hands on Engineering Laboratory	0	0	3	3
6	ME102T	Engineering Graphics	1	0	3	6
7	CS101L	Data Structure & Algorithms Lab	0	0	3	3
8	NO107/ NO105/ NO 106/ NO 108	NSO/NSS/NCC/NCA	0	0	2	2
Total Credits						41

### 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	ME201T	Engineering Machines	3	0	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	HS 201	Economics	2	1	0	6
8	PH201L	Introductory Physics Laboratory	0	0	3	3
Third Semester Total Credits						39

### 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	PH304T	Mathematical Physics	2	1	0	6
5	PH301L	General Physics Laboratory	0	0	3	3
6	EE101L	Digital Circuits Laboratory	0	0	3	3
7	CS301L	Computer Architecture Lab	0	0	3	3
Fourth Semester Total Credits						33

### SEMESTER - V

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH301T	Electrodynamics	2	1	0	6
2	PH420T	Electronics	3	0	0	6
3	EE302C	Fundamentals of Digital Signal Processing	2	0	2	6
4	ME203T	Fluid Mechanics	3	0	0	6
5	PH402L	Electronics Laboratory	0	0	3	3
6	PH401L	Advanced Physics Laboratory	0	0	3	3
7		Institute Elective-				6
Fifth Semester Total Credits						36

### SEMESTER - VI

Sl. No.	Course Code	Course Name	L	T	P	C
1	PH401T	Quantum Mechanics-II	2	1	0	6
2	PH402T	Condensed Matter Physics	2	1	0	6
3	CE301T	Environmental Studies	3	0	0	6
4	CS204T	Artificial Intelligence	3	0	0	6
5	--	Institute Elective-2/RnD Project-I or II				6
6	ME207L	Mechanics and Measurement Lab	0	0	3	3
7	CS201L	Artificial Intelligence Lab	0	0	3	3
Sixth Semester Total Credits						36

### SEMESTER - VII

Sl. No.	Course Code	Course Name	L	T	P	C
1	CS601S	Seminar	0	0	4	4
2		Institute Elective-3				6
3	PH501C	Numerical Methods	2	0	2	6
4		Institute Elective-4/BTP-I				6
Seventh Semester Total Credits						22

### SEMESTER - VIII

Sl. No.	Course Code	Course Name	L	T	P	C
1		Institute Elective – 5	2	1	0	6
2		Institute Elective – 6	2	1	0	6
3		Institute Elective – 7/ BTP-II	2	1	0	6
Eighth Semester Total Credits						18

	Overall Credits Required (Minimum)	257/2 66
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