

B.Tech Department of Engineering Physics - 2022

Semester I					
Old Course Code	New Course Code	Course Name	Credits	Offered by...	
MA1110	MA10110	Calculus-I	1	MA	BS
MA1220	MA10220	Calculus-II	1	MA	BS
EP1108	EP10108	Modern Physics	2	PH	BS
CY1018	CY10018	Environmental Chemistry	2	CY	BS
LA1760	LA10760	English communication	2	SS	SS
ID1063	ID10063	Introduction to Programming	3	CSE	BE
EP1128	EP11020	Basic Electric Circuits	2	PH	DC
EP1118	EP11030	Maths for Physics	2	PH	DC
BT1010		Introduction to life science	1	BS	BS
		Total Credits	16		

Semester II					
MA1140	MA10140	Elementary Linear Algebra	1	MA	BS
MA1150	MA10150	Differential Equations	1	MA	BS
ID1054	ID10054	Digital Fabrication	2	AI	BE
ID1050/AI3217	AI10000	Introduction to AI	1	AI	BE
EP1031	EP12011	EP Lab - I	2	PH	BS
EP1208	EP12010	Electricity and Magnetism	2	PH	DC
FExxxx		Free elective	3	FE	FE
LAxxxx		LA/CA	3	LA/CA	LA/CA
EM3020	EM30020	Introduction to Entrepreneurship	1	LA/CA	LA/CA
		Total Credits	16		

Semester III					
ID2230	CS20233	Data Structures and Applications	3	CSE	BE
XXxxxx		Personality Development	1	LA	SS
CY1031	CY10031	Chemistry Lab	2	CY	BS
MA2110	MA20110	Introduction to Probability	1	MA	BS
EExxxx		Digital Circuits	3	EE	BE
EP2108	EP23030	Special Relativity	2	PH	DC
EP2118	EP23020	Analog Electronics	2	PH	DC
EP2100	EP23010	Classical Mechanics	3	PH	DC
		Total Credits	17		

Semester IV					
MA2140	MA20140	Introduction to Statistics	1	MA	BS
EP2228	EP24050	Fluid Dynamics	2	PH	DC
EP3227	EP24070	Nonlinear dynamics	1	PH	DC
EP3208	EP24010	Advanced Mathematical Physics	3	PH	DC
EP2200	EP24020	Thermodynamics	3	PH	DC
EP4210	EP24040	Computational Physics	3	PH	DC
EP2418	EP24060	Electronic Device Physics	2	PH	DC
EP2041	EP23011	EP lab -II	2	PH	DC
EP3220	EP24030	Optics and Photonics	3	PH	DC
		Total Credits	20		

Semester V					
EP3100	EP35010	Quantum Mechanics-I	3	PH	DC
EP3105	EP35015	Project-I	3	PH	DC
EP3110	EP35020	Electrodynamics	3	PH	DC
EP3120	EP35030	Statistical Mechanics	3	PH	DC
EP4071	EP35011	EP lab - III	2	PH	DC
LAxxxx		LA elective	3	LA	LA
EExxxx		Linear Systems & Signal Processing	3	EE	BE
		Total Credits	20		

Semester VI					
EP3200	EP36020	Solid State Physics	3	PH	DC

EP3210	EP36010	Quantum Mechanics-II	3	PH	DC
EP3230	EP36030	Atomic and Molecular Physics	3	PH	DC
EP3205	EP36015	Project II	3	PH	DC
EPxxxx		Elective-I	3	PH	DE
EP5101	EP36011	EP lab - IV	2	PH	DC
		Total Credits	17		
*Internship Students: Waive Btech Project+Departmental Elective OR Two Departmental Electives.					

Semester VII					
EP4108	EP47020	Nuclear Physics	2	PH	DC
EP4710	EP47010	Particle Physics	3	PH	DC
EPxxxx		Elective-II	3	PH	DE
EP5201	EP47011	EP lab - V	2	PH	DC
FExxxx		Free Elective	3	FE	FE
		Total Credits	13		

Semester VIII					
EPxxxx		Elective-III	3	PH	DE
XXxxxx		Free Elective	6	FE	FE
LAxxxx		LA	3	LA	LA
		Total Credits	12		
		Total Credits	131		