

## B.Tech. Engineering Physics - 2024 onwards

Semester I				
Course Code	Course Name	Credits	Offered by...	
MA1110	Calculus-I	1	MA	BS
MA1220	Calculus-II	1	MA	BS
EP1108	Modern Physics	2	PH	BS
CY1018	Environmental Chemistry	2	CY	BS
LA1760	English communication	2	SS	SS
ID1063	Introduction to Programming	3	CSE	BE
EP1128	Basic Electric Circuits	2	PH	DC
EP1118	Maths for Physics	2	PH	DC
BT1010	Introduction to life science	1	BS	BS
	<b>Total Credits</b>	<b>16</b>		

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

Semester III				
ID2230	Data Structures and Applications	3	CSE	BE
EP2041	EP Lab-II	2	PH	DC
MA2110	Introduction to Probability	1	MA	BS
EE1201	Digital Circuits	3	EE	BE
EP2108	Special Relativity	2	PH	DC
EP2118	Analog Electronics	2	PH	DC
EP4210	Computational Physics	3	PH	DC
EP2100	Classical Mechanics	3	PH	DC
EP2130	Mathematical Physics	2	PH	DC
	<b>Total Credits</b>	<b>21</b>		

Semester IV				
MA2140	Introduction to Statistics	1	MA	BS
EP2228	Fluid Dynamics	2	PH	DC
EP3208	Advanced Mathematical Physics	3	PH	DC
EP2200	Thermodynamics	3	PH	DC

EP3100	Quantum Mechanics-I	3	PH	DC
CY1031	Chemistry Lab	2	CY	BS
EP3220	Optics and Photonics	3	PH	DC
LAXXXX	LA elective	3	LA	LA
	<b>Total Credits</b>	<b>20</b>		

<b>Semester V</b>				
EP3200	Solid State Physics	3	PH	DC
EP3210	Quantum Mechanics-II	3	PH	DC
EP3110	Electrodynamics	3	PH	DC
EP3120	Statistical Mechanics	3	PH	DC
EP4071	EP lab - III	2	PH	DC
EP3230	Atomic and Molecular Physics	3	PH	DC
	<b>Total Credits</b>	<b>17</b>		

<b>Semester VI</b>				
XXXXXX	Free electives	4	FE	FE
EP4200	Electronic Device Physics	2	PH	DC
EP3105	Project I	3	PH	DC
EPxxxx	Elective-I	3	PH	DE
EP5101	EP lab - IV	2	PH	DC
	<b>Total Credits</b>	<b>14</b>		

<b>Semester VII</b>				
EP4108	Nuclear Physics	2	PH	DC
EP4710	Particle Physics	3	PH	DC
EPXXXX/EP3205	Elective-II/Project-II	3	PH	DE
EP5201	EP lab - V	2	PH	DC
EE1206	Linear Systems & Signal Processing	3	EE	BE
XXXXXX	Free Elective	3	FE	FE
	<b>Total Credits</b>	<b>16</b>		

<b>Semester VIII</b>				
EPxxxx	Elective-III	3	PH	DE
XXxxxx	Free Elective	2	FE	FE
LAXxxx	LA	3	LA	LA
	<b>Total Credits</b>	<b>8</b>		
	<b>Total Credits</b>	<b>128</b>		

Course Typ	Credits	%age
BS	15	12
BE	15	12
SS	2	2
LA/CA	10	8
FE	12	9
DC	65	51
DE	9	7
<b>TOTAL</b>	<b>128</b>	<b>100</b>

Sem	BS	BE	SS	LA	FE	DC	DE	Total
1	7	3	2	0	0	4	0	16
2	4	3	0	4	3	2	0	16
3	1	6	0	0	0	14	0	21
4	3	0	0	3	0	14	0	20
5	0	0	0	0	0	17	0	17
6	0	0	0	0	4	7	3	14
7	0	3	0	0	3	7	3	16
8	0	0	0	3	2	0	3	8
Total	15	15	2	10	12	65	9	128

Nr. of mandatory		Credits	%age
3 cr	17	51	52
2 cr	19	38	39
1 cr	9	9	9
<b>TOTAL</b>	<b>45</b>	<b>98</b>	<b>100</b>