

### Engineering Physics (2020) Curriculum

Semester	Course No	Course Name	Credits	Offered by...
1	MA1110	Calculus-I	1	MA
1	MA1220	Calculus-II	1	MA
1	EP1108	Modern Physics	2	PH
1	CY1018	Environmental Chemistry	2	CY
1	SSxxxx	English communication	2	SS
1	ID1063	Introduction to Programming	3	CSE
1	EP1128	Basic Electric Circuits	2	PH
1	EP1118	Maths for Physics	2	PH
<b>Total</b>			<b>15</b>	
2	MA1140	Elementary Linear Algebra	1	MA
2	MA1150	Differential Equations	1	MA
2	MExxxx	Introduction to Mechanical Engg	3	ME
2	EP1031	EP Lab - 1	2	PH
2	EP1208	Electricity and Magnetism	2	PH
2	SSxxxx	Life Skills	1	SS
2	BTxxxx	Life Sciences	1	BS
2	FExxxx	Free elective	3	FE
2	LAxxxx	LA/CA	3	LA/CA
2	SSxxx	Introduction to Entrepreneurship	1	SS
<b>Total</b>			<b>18</b>	
3	CS2233	Data Structure	3	CSE
3	XXxxxx	Personality Development	1	LA
3	CY1031	Chemistry Lab	2	CY
3	MA2110	Introduction to Probability	1	MA
3	EExxxx	Digital Circuits	3	EE
3	EP2108	Special Relativity	2	PH
3	EP2118	Analog Electronics	2	PH
3	EP2100	Classical Mechanics	3	PH
<b>Total</b>			<b>17</b>	
4	MA2140	Introduction to Statistics	1	MA
4	AI3217	Introduction to AI	1	AI
4	EP3227	Nonlinear dynamics	1	PH

4	EP3208	Advanced Mathematical Physics	2	PH
4	EP2200	Thermodynamics	3	PH
4	EP4210	Computational Physics	3	PH
4	EP2418	Electronic Device Physics	2	PH
4	EP2041	Core EP lab-2	2	PH
4	EP3220	Modern Optics	3	PH
<b>Total</b>			<b>18</b>	
5	EP3100	Quantum Mechanics-1	3	PH
5	EP3105	Project-1	3	PH
5	EP3110	Electrodynamics	3	PH
5	EP3120	Statistical Mechanics	3	PH
5	EP4071	Core EP lab-3	2	PH
5	LAxxxx	LA elective	3	LA
5	EExxxx	Linear Systems & Signal Processing	3	EE
<b>Total</b>			<b>20</b>	
6	EP3200	Solid State Physics	3	PH
6	EP3210	Quantum Mechanics-II	3	PH
6	EP3230	Atomic and Molecular Physics	3	PH
6	EP3205	B.Tech Project II	3	PH
6	EPxxxx	Elective-I	3	PH
6	EP5101	Core EP lab-4	2	PH
<b>Total</b>			<b>17</b>	
7	EP4108	Nuclear Physics	2	PH
7	EP4710	Particle Physics	3	PH
7	EPxxxx	Elective-II	3	PH
7	EP5201	Core-EP Lab-5	2	PH
7	FExxxx	Free Elective	3	FE
<b>Total</b>			<b>13</b>	
8	EPxxxx	Elective-III	3	PH
8	XXxxxx	Free Elective	3	FE
8	FExxxx	Free Elective	3	FE
8	LAxxxx	LA	3	LA
<b>Total</b>			<b>12</b>	
			<b>130</b>	

### Electives

<b>Odd Semester</b>	<b>Even Semester</b>
Advance Solid State Physics	Advanced Functional Materials
CFT	Advance Particle Physics
Advanced Imaging Techniches	Data Science Analysis
Ultrafast Lasers and Applications	Spintronics
Solar Cells and Technology	Plasma Physics and Applications
GTR	Accelerator Physics and Megnetohydrodynamics
Computational Solid State Physics	Introduction to Astrophysics
Adv. Stat. Mech	Laser spectroscopy
Fluid Mechanics	
QFT	
Introduction to Nanomagnetism	