

**Department of Mechanical Engineering**  
**Proposed First year structure 23-24 as per NEP 2020**

Semester I										
Course Category	Category under NEP	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
	<b>Mandatory</b>	<b>Induction Program</b>	<i>3-weeks duration in the beginning of the semester</i>							
BSC1	Mandatory: Major	Engineering Mathematics- I	3	1	-					4
ESC1	Mandatory: Major	Engineering Graphics	2		-					2
ESC2	Minor	Basic Electronics	2	-	-					2
BSC2	Open Electives	Engineering Physics/Engg. Chemistry	3	-	-					3
HSSM1	Ability Enhance course	Communication Skill	2	-	-					2
ESC3	Open Electives (Self Study)	Energy and Environment Engineering		-	-					Audit
BSC3	Open Electives	Engineering Physics Lab/Engg. Chemistry lab	-	-	2					1
ESC4	Skill Enhancement course	Engineering Graphics Lab	-	-	4					2
HSSM2	Ability Enhance course	Communication Skills Lab	-	-	2					1
PCC1	Vocational Skill courses	Workshop practice such as fitting, welding, turning, etc			4					2
HSSM3	Co-curricular courses	Life skill in modern life /Health and Yoga /UHV	1		-					1
ESC4	Minor	Basic Electronics Lab			2					1
<b>Total</b>			<b>14</b>	<b>1</b>	<b>14</b>	<b>330</b>	<b>100</b>	<b>420</b>	<b>850</b>	<b>21</b>

Semester II										
Course Category	Category under NEP	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
BSC4	Mandatory: Major	Engineering Mathematics- II	3	1	-					4
ESC5	Mandatory: Major	Engineering Mechanics	3		-					3
ESC6	Minor	Computer Programming	2	-	-					2
BSC5	Open Electives	Engineering Physics/Engg. Chemistry	3	-	-					3
ESC3	Open Electives (Self Study)	Energy and Environment Engineering		-	-					Audit
BSC6	Open Electives	Engineering Physics Lab/Engg. Chemistry lab	-	-	2					1
ESC7	Minor	Computer Programming Lab	-	-	2					1
HSSM4	Ability Enhance course	Report writing and presentation skills	1	1						2
PCC2	Skill Enhancement course	Auto Cad			2					1
PCC3	Vocational Skill courses	Basic Mechanical Practices skill based training			2					1
ESC8	Indian Knowledge System	Ancient weapons Technology								1
HSSM3	Co-curricular courses	NSS/NCC/ Sports			4					2
ESC9	Minor	Engg Mechanics Lab			2					1
<b>Total</b>			<b>12</b>	<b>2</b>	<b>14</b>					<b>22</b>

Total Credit 21 +22 = 43 Cr

**Plus 4 credit (120 hrs) compulsory to get the certificate in case opt for exit of operator levels such as CNC turning/ Mechanical Draftsman/3 D printing/Ref and Ac repair/Joining practices/vehicle maintenance or else no need**