



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Core	ME103101ME	Material Science	T	3	1	0	20	0	30	0	50	0	100	4
2.	Program Core	ME103102ME	Mechanics of Solids - I	T	3	1	0	20	0	30	0	50	0	100	4
3.	Program Core	ME103103ME	Applied Thermodynamics	T	3	1	0	20	0	30	0	50	0	100	4
4.	Program Core	ME103104ME	Manufacturing Science - I	T	3	1	0	20	0	30	0	50	0	100	4
5.	Program Core	ME103105ME	Machine Drawing	T	1	3	0	20	0	30	0	50	0	100	4
6.	Program Core	ME103001MA	Mathematics- III	T	4	0	0	20	0	30	0	50	0	100	4
7.	Laboratory	ME103401ME	Mechanical Lab-1	P	0	0	2	40	0	20	0	40	0	100	1
8.	Laboratory	ME103402ME	Mechanical Lab-2	P	0	0	2	40	0	20	0	40	0	100	1
					17	7	4							800	26



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Core	ME104101ME	Fluid Mechanics	T	3	1	0	20	0	30	0	50	0	100	4
2.	Program Core	ME104102ME	Mechanics of Solids - II	T	3	1	0	20	0	30	0	50	0	100	4
3.	Program Core	ME104103ME	Internal Combustion Engines	T	3	1	0	20	0	30	0	50	0	100	4
4.	Program Core	ME104104ME	Kinematics of Machines	T	3	1	0	20	0	30	0	50	0	100	4
5.	Program Core	ME104105ME	Manufacturing Science - II	T	3	1	0	20	0	30	0	50	0	100	4
6.	Program Core	ME104001MA	Mathematics-IV	T	4	0	0	20	0	30	0	50	0	100	4
7.	Laboratory	ME104407ME	Mechanical Lab-3	P	0	0	2	40	0	20	0	40	0	100	1
8.	Laboratory	ME104408ME	Mechanical Lab-4	P	0	0	2	40	0	20	0	40	0	100	1
<b>Total</b>					<b>19</b>	<b>5</b>	<b>4</b>							<b>800</b>	<b>26</b>



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Elective-I	ME105201ME	Dynamics and Vibration	T	3	0	0	20	0	30	0	50	0	100	3
2.	Program Elective-I	ME105202ME	Industrial Engineering & Management												
3.	Program Elective-I	ME105203ME	Introduction to Aerospace Engineering												
4.	Program Elective-II	ME105211ME	Design and Optimization of Energy systems	T	3	0	0	20	0	30	0	50	0	100	3
5.	Program Elective-II	ME105212ME	Measurement and Control												
6.	Open Elective-I	ME105301ME	Computational Fluid Dynamics	T	3	0	0	20	0	30	0	50	0	100	3
7.	Open Elective-I	ME105302ME	Composite Materials and Mechanics												
8.	Open Elective-I	ME105303ME	Finite Element Method												
9.	Program Core	ME105101ME	Heat and Mass Transfer	T	3	1	0	20	0	30	0	50	0	100	4
10.	Program Core	ME105102ME	Refrigeration and Air Conditioning	T	3	1	0	20	0	30	0	50	0	100	4
11.	Program Core	ME105103ME	Machine Design - 1	T	3	1	0	20	0	30	0	50	0	100	4
12.	Laboratory	ME105401ME	Mechanical Lab - 5	P	0	0	2	40	0	20	0	40	0	100	1
13.	Laboratory	ME105402ME	Mechanical Lab - 6	P	0	0	2	40	0	20	0	40	0	100	1
14.	Internship	ME105701ME	Summer Internship 1	P	0	0	0	50	0	0	0	50	0	100	1
<b>Total</b>						<b>18</b>	<b>3</b>	<b>4</b>						<b>900</b>	<b>24</b>



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Elective-III	ME106201ME	Air Conditioning Techniques and System Design	T	3	0	0	20	0	30	0	50	0	100	3
2.	Program Elective-III	ME106202ME	Fatigue Creep and Fracture												
3.	Program Elective-III	ME106203ME	Operations Research												
4.	Open Elective-II	ME106301ME	Design Thinking and Product Innovation	T	3	0	0	20	0	30	0	50	0	100	3
5.	Open Elective-II	ME106302ME	Experimental Stress Analysis												
6.	Open Elective-II	ME106303ME	Robotics												
7.	Open Elective-II	ME106304ME	Smart Materials and Systems												
8.	Program Core	ME106101ME	Machine Design II-Mechanical Drives	T	3	1	0	20	0	30	0	50	0	100	4
9.	Program Core	ME106102ME	Dynamics of Machines	T	3	1	0	20	0	30	0	50	0	100	4
10.	Program Core	ME106103ME	Turbo Machinery	T	3	1	0	20	0	30	0	50	0	100	4
11.	Laboratory	ME106401ME	Mechanical Lab - 7	P	0	0	2	40	0	20	0	40	0	100	1
12.	Laboratory	ME106402ME	Mechanical Lab - 8	P	0	0	2	40	0	20	0	40	0	100	1
<b>Total</b>					<b>15</b>	<b>3</b>	<b>4</b>							<b>700</b>	<b>20</b>



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Elective-IV	ME107201ME	Fluid Mechanics-II-Fluid Machinery	T	3	0	0	20	0	30	0	50	0	100	3
2.	Program Elective-IV	ME107202ME	Solar Energy Utilization												
3.	Program Elective-V	ME107211ME	Energy Conversion System	T	3	0	0	20	0	30	0	50	0	100	3
4.	Program Elective-V	ME107212ME	Power Plant Engineering												
5.	Program Elective-V	ME107213ME	Tribology												
6.	Open Elective-III	ME107301ME	Air Pollution Control	T	3	0	0	20	0	30	0	50	0	100	3
7.	Open Elective-III	ME107302ME	Integrated Product Development												
8.	Open Elective-III	ME107303ME	Optimization Techniques												
9.	Program Core	ME107101ME	Production Management	T	3	1	0	20	0	30	0	50	0	100	4
10.	Laboratory	ME107401ME	Mechanical Lab – 9	P	0	0	2	40	0	20	0	40	0	100	1
11.	Internship	ME107701ME	Summer Internship II	P	0	0	2	50	0	0	0	50	0	100	2
12.	Laboratory	ME107801ME	Project Work	P	0	0	8	40	0	20	0	40	0	100	4
<b>Total</b>						<b>12</b>	<b>1</b>	<b>12</b>						<b>700</b>	<b>20</b>



Sl. No	Course Title	Course Code	Course Name	Type	L	T	P	TA		MSE		ESE		Total Marks	Credits
								Max	Min	Max	Min	Max	Min		
1.	Program Elective-VI	ME108201ME	Additive Manufacturing	T	3	0	0	20	0	30	0	50	0	100	3
2.	Program Elective-VI	ME108202ME	Computer Aided Design and Manufacturing												
3.	Program Elective-VI	ME108203ME	Heat Exchangers: Fundamental & Design												
4.	Program Elective-VII	ME108211ME	Advance Refrigeration and Air Conditioning	T	3	0	0	20	0	30	0	50	0	100	3
5.	Program Elective-VII	ME108212ME	Alternative fuels and emission control in internal combustion engines												
6.	Program Elective-VII	ME108213ME	Automobile Engineering												
7.	Open Elective-IV	ME108301ME	Experimental Techniques for the Engineers	T	3	0	0	20	0	30	0	50	0	100	3
8.	Open Elective-IV	ME108302ME	Welding Technology												
9.	Open Elective-V	ME108311ME	Non-Conventional Energy Resources	T	3	1	0	20	0	30	0	50	0	100	3
10.	Open Elective-V	ME108312ME	Nature Inspired Design												
11.**	Internship	ME108701ME	Major Internship	P	0	0	2	50	0	0	0	50	0	100	6
<b>Total</b>						<b>12</b>	<b>1</b>	<b>12</b>						<b>500</b>	<b>12</b>

**\*\*The students who opt for Major Internship will have to take '2' open elective courses along with the Major Internship making a total 12 credits for VIII<sup>th</sup> Semester.**