

# Curriculum Structure

ME Department

## 3<sup>rd</sup> Semester

**Theory:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	BS-M301	Mathematics III	3	1	0	4
2	BS-BIO301	Biology	3	0	0	3
3	ES-ECE301	Basic Electronics Engineering	3	0	0	3
4	ES-ME301	Engineering Mechanics	3	1	0	4
5	PC-ME301	Thermodynamics	3	1	0	4
6	PC-ME302	Manufacturing Processes	4	0	0	4
		TOTAL THEORY	19	3	0	22

**Practical / Sessional:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME391	Practice of Manufacturing Processes	0	0	3	1.5
		TOTAL PRACTICAL	0	0	3	1.5
		TOTAL OF THIRD SEMESTER	19	3	3	23.5

## 4<sup>th</sup> Semester

**Theory:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	ES-ME401	Materials Engineering	3	0	0	3
2	PC-ME401	Applied Thermodynamics	3	1	0	4
3	PC-ME402	Fluid Mechanics & Fluid Machines	3	1	0	4
4	PC-ME403	Strength of Materials	3	1	0	4
5	PC-ME404	Metrology and Instrumentation	3	1	0	4
		TOTAL THEORY	15	4	0	19

**Practical / Sessional:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME491	Practice of Manufacturing	0	0	3	1.5

		Processes and Systems Laboratory				
2	PC-ME492	Machine Drawing- I	0	0	3	1.5
3	MC 481	Environmental Science	-	-	2	0
		TOTAL PRACTICAL	0	0	8	3
		TOTAL OF FOURTH SEMESTER	15	4	8	22

## 5<sup>th</sup> Semester

### Theory:

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME501	Heat Transfer	3	1	0	4
2	PC-ME502	Solid Mechanics	3	1	0	4
3	PC-ME503	Kinematics & Theory of Machines	3	1	0	4
4	HM-HU501	Effective Technical Communication	3	0	0	3
5	MC501	Essence of Indian Knowledge Tradition	-	2	-	0
		TOTAL THEORY	12	5	0	15

### Practical / Sessional:

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME591	Mechanical Engineering Laboratory I (Thermal)	0	0	3	1.5
2	PC-ME592	Machine Drawing-II	0	0	3	1.5
3	PW-ME581	Project-I (30 hrs. Total)	0	0	2	1
		TOTAL PRACTICAL	0	0	8	4
		TOTAL OF FIFTH SEMESTER	12	5	8	19

## 6<sup>th</sup> Semester

### Theory:

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME601	Manufacturing Technology	4	0	0	4
2	PC-ME602	Design of Machine Elements	3	1	0	4
3	PE-ME601F	Composite Materials	3	0	0	3
4	PE-ME602H	Robotics	3	0	0	3
5	HM-HU601	Operations Research	3	0	0	3

6.	MC601	Constitution of India	-	2	-	0
		TOTAL THEORY	16	3	0	17

**Practical / Sessional:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME691	Mechanical Engineering Laboratory II (Design)	0	0	3	1.5
2	PW-ME681	Project-II (90 hrs. Total)	0	0	4	2
		TOTAL PRACTICAL	0	0	7	3.5
		TOTAL OF SIXTH SEMESTER	16	3	7	20.5

## 7<sup>th</sup> Semester

**Theory:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME701	Advanced Manufacturing Technology	3	0	0	3
2	PE-ME701G	Finite Element Analysis	3	0	0	3
3	PE-ME702J	CAD/CAM	3	0	0	3
4	OE-ME 701H	Machine Learning	3	0	0	3
5	HM-HU701	Economics for Engineers	2	0	0	2
		TOTAL THEORY	14	0	0	14

**Practical / Sessional:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours			Credits
			L	T	P	
1	PC-ME791	Mechanical Engineering Laboratory III (Manufacturing)	0	0	3	1.5
2	PW-ME781	Project-III	0	0	6	3
		TOTAL PRACTICAL	0	0	9	4.5
		TOTAL OF SEVENTH SEMESTER	14	0	9	18.5

## 8<sup>th</sup> Semester

**Theory:**

Sl. No.	Subject Code	Subject Name	Total no. of contact hours	Credits
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			<b>L</b>	<b>T</b>	<b>P</b>	
1	PE-ME801B	Power Plant Engineering	3	0	0	3
2	PE-ME802F	3D Printing and Design	3	0	0	3
3	OE-ME 801F	Waste to Energy- An Overview	3	0	0	3
4	OE-ME 802 H	Internet of Things (IoT)	3	0	0	3
		TOTAL THEORY	12	0	0	12

**Practical / Sessional:**

<b>Sl. No.</b>	<b>Subject Code</b>	<b>Subject Name</b>	<b>Total no. of contact hours</b>			<b>Credits</b>
			<b>L</b>	<b>T</b>	<b>P</b>	
1	PW-ME881	Project-IV	0	0	10	5
2	PW-ME882	Comprehensive viva	0	0	0	1.5
		TOTAL PRACTICAL	0	0	10	6.5
		TOTAL OF EIGHTH SEMESTER	12	0	10	18.5