

DEPARTMENT OF MECHANICAL ENGINEERING

S.No	Course Code	Course Title	L-T-P	Credits
Semester -1				
1	11HS101	English	2-0-2	3
2	11BS101	Engineering Mathematics	3-1-0	4
3	11BS104	Engineering Chemistry	3-0-2	4
4	11ES101	Problem Solving through Programming	3-0-2	4
5	11ES102	Measurements	3-0-2	4
6	11ES105	Workshop Practice	0-0-4	2
Total credits				21

Semester -2				
1	11HS102	Technical Communication Skills	2-0-2	3
2	11BS102	Advanced Engineering Mathematics	3-0-2	4
3	11BS103	Engineering Physics	3-0-2	4
4	11BS105	Ecology and Environment	2-0-0	2
5	11ES103	Engineering Materials	3-0-0	3
6	11HS103	Energy and Society	3-0-0	3
7	11ES104	Engineering Graphics with CAD	0-0-4	2
8	11MP101	Mini Project	0-0-2	1
Total credits				22

Semester -3				
1	11BS201	Probability and Statistics	3-1-0	4
2	11ES201	Engineering Mechanics	3-0-2	4
3	11ES202	Fluid Mechanics	3-0-2	4
4	11ME201	Thermodynamics	3-1-0	4
5	11ME202	Manufacturing Process - 1	3-0-2	4
6	11ME203	Kinematics of Machines	3-1-0	4
7	11MP201	Mini Project	0-0-2	1
Total credits				25

Semester -4				
1	11BS202	Mathematical Methods	3-1-0	4
2	11ES203	Mechanical Systems	3-1-0	4
3	11ME204	Applied Thermodynamics	3-1-0	4
4	11ME205	Strength of Materials	3-0-2	4
5	11ME206	Manufacturing Process - 2	3-0-2	4
6	11ME207	Industrial Engineering Techniques	3-0-2	4
7	11HS211	Organisation Management	3-0-0	3
8		Soft Skills	0-0-2	
Total credits				27

Semester -5				
1	11ME301	Dynamics of Machines	3-1-0	4
2	11ME302	Hydraulic Machines and Systems	3-1-0	4
3	11ME303	IC Engines and Gas Turbines	3-0-2	4
4	11ME304	Operations Research	3-1-0	4
5		Prof Elective – 1	3-0-0	3
6	11HS301/2	Professional Communication Skills	3-0-0	3
		Total credits		22
Semester -6				
1	11-ME305	Heat Transfer	3-0-2	4
2	11-ME306	Design of Machine Elements	3-1-0	4
3	14-ME307	Advanced Manufacturing Technology	3-0-2	4
4		Prof. Elective – 2	3-0-0	3
5		Prof. Elective – 3	3-0-0	3
6	11HS303/4/5/ 6	HS Elective	3-0-0	3
7	11-MP301	Mini Project -3	0-0-2	1
				22
Semester -7				
1	11ME401	Design of Transmission Elements	3-1-0	4
2	11ME402	Engineering Management	3-1-0	4
3		Prof. Elective - 4	3-0-0	3
4		Prof. Elective - 5	3-0-0	3
5		Open Elective - 1	3-0-0	3
6		Open Elective - 2	3-0-0	3
				20
Semester -8				
1	11-FPS01	Practice School		18
2		Project + Open Elective ³ + Open Elective ⁴		18

Professional Elective 1				
1.	11-ME330	Finite Element Methods	3-0-0	3
2.	11-ME331	Refrigeration & Air Conditioning	3-0-0	3
3.	11-ME332	Reverse Engineering & Rapid Prototyping	3-0-0	3
4.	11-ME333	Advanced Mechanisms Design	3-0-0	3
5.	11-ME334	Operations Management	3-0-0	3
Professional Elective 2				
6.	11-ME335	Mechanical Vibrations	3-0-0	3

7.	11-ME336	Automobile Engineering	3-0-0	3
8.	11-ME337	Total Quality Management	3-0-0	3
9.	11-ME338	Computer Integrated Manufacturing	3-0-0	3
Professional Elective 3				
10.	11-ME339	Computer Aided Design	3-0-0	3
11.	11-ME340	Non Conventional Energy Sources	3-0-0	3
12.	11-ME341	Management Information Systems	3-0-0	3
13.	11-ME342	Cellular Manufacturing	3-0-0	3
Professional Elective 4				
14.	11-ME430	Condition Monitoring & Fault Diagnosis	3-0-0	3
15.	11-ME431	Supply chain management	3-0-0	3
16.	11-ME432	Modern Manufacturing Processes	3-0-0	3
17.	11-ME433	Turbo machines	3-0-0	3
Professional Elective 5				
18.	11-ME434	Computational Fluid Dynamics	3-0-0	3
19.	11-ME435	Power Plant Engineering	3-0-0	3
20.	11-ME436	Work Study & Ergonomics	3-0-0	3
21.	11-ME437	Concurrent Engineering	3-0-0	3

Open Electives

		Course	Credits	Credits
			L:T:L/P	
Open Elective 1				
1.	11-OE301	Introduction to Nano Technology	3-0-0	3
2.	11-OE302	Operations Research	3-0-0	3
Open Elective 2				
3.	11-OE303	Micro and Nano fabrications	3-0-0	3
4.	11-OE304	Management Information Systems	3-0-0	3
Open Elective 3				
5.	11-OE401	Polymer Nano Composites	3-0-0	3
6.	11-OE402	Supply chain management	3-0-0	3
Open Elective 4				
7.	11-OE403	Characterization of Nano Materials	3-0-0	3
8.	11-OE404	Work study and ergonomics	3-0-0	3
Open Elective 5				
9.	11-OE405	Nano Fluids	3-0-0	3
10.	11-OE406	Operations Management	3-0-0	3