COURSE STRUCTURE

DIPLOMA IN MECHANICAL ENGINEERING



Department of Mechanical Engineering
Jaypee University of Engineering & Technology

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FIRST SEMESTER

SI. No	Course Title	Hours per week			Total contact	
		L	Т	Р	hrs/ week	Credits
1.	Mathematics-I	2	1	0	3	3
2.	AppliedPhysics-I	2	1	0	3	3
3.	Applied Chemistry	2	1	0	3	3
4.	Communication Skills in English	2	0	0	2	2
5.	Engineering Graphics	0	0	3	3	1.5
6.	Engineering Workshop Practice	0	0	3	3	1.5
7.	Applied Physics –I Lab	0	0	2	2	1
8.	Applied Chemistry Lab	0	0	2	2	1
9.	Sports and Yoga	0	0	2	2	1
10.	Communication Skills in English Lab	0	0	2	2	1
	Total				25	18

SECOND SEMESTER

			ours p wee		Total contact	
SI. No	Course Title	L	Т	Р	hrs/ week	Credits
1	Mathematics-II	3	1	0	4	4
2	Applied Physics-II	2	1	0	3	3
3	Introduction to IT Systems	2	0	0	2	2
4	Fundamentals of Electrical & Electronics Engineering	2	1	0	3	3
5	Engineering Mechanics	2	1	0	3	3
6	Applied Physics – II Lab	0	0	2	2	1
7	Introduction to IT Systems Lab	0	0	4	4	2
8	Fundamentals of Electrical & Electronics Engineering Lab	0	0	2	2	1
9	Engineering Mechanics Lab	0	0	2	2	1
10	Environmental Science	2	0	0	2	0
	Total				27	20

THIRD SEMESTER

		Н	ours week		Total contact	
SI. No	Course Title	L	Т	Р	hrs/ week	Credits
1	Basic Mechanical Engineering	3	1	0	4	4
2	Computer Aided Machine Drawing Practice	0	0	2	2	1
3	Material Science & Engineering	3	0	0	3	3
4	Fluid Mechanics & Hydraulic Machinery	2	1	0	3	3
5	Manufacturing Engineering	3	0	0	3	3
6	Thermal Engineering-I	3	0	0	3	3
7	Manufacturing Engineering Lab-I	0	0	2	2	1
8	Fluid Mechanics & Hydraulic Machinery Lab	0	0	2	2	1
9	Thermal Engineering Lab-I	0	0	2	2	1
10	Summer Internship - I	0	0	0	0	0
	Total					20

FOURTH SEMESTER

SI. No	Course Title	Но	urs p wee		Total contact hrs/ week	Credits
	000.000	L	Т	Р		
1	Measurements & Metrology	2	1	0	3	3
2	Strength of Materials	3	1	0	4	4
3	Thermal Engineering - II	2	1	0	3	3
4	Elective - I	3	0	0	3	3
5	Elective - II	3	0	0	3	3
6	Material Testing Lab	0	0	2	2	1
7	Measurements & Metrology Lab	0	0	2	2	1
8	Thermal Engineering Lab - II	0	0	2	2	1
9	Minor Project	0	0	2	2	1
10	Essence of Indian Knowledge and Tradition	2	0	0	2	0
	Total				26	20

FIFTH SEMESTER

SI. No			urs wee		Total contact	
31.140	Course Title	L	Т	Р	hrs / week	Credits
1	Advanced Manufacturing Processes	3	0	0	3	3
2	Theory of Machines & Mechanisms	2	1	0	3	3
3	Industrial Engineering & Management	3	0	0	3	3
4	Elective - III	3	0	0	3	3
5	Elective - IV	3	0	0	3	3
6	Open Elective - I	3	0	0	3	3
7	CAD/CAM Lab	0	0	2	2	1
8	Manufacturing Engineering Lab -II	0	0	2	2	1
9	Summer Internship - II	0	0	0	0	0
10	Major Project	0	0	4	4	2
	Total				26	22

SIXTH SEMESTER

SI. No	Course Title		ours wee	-	Total contact hrs / week	Credits
31.140		٦	Т	Р		
1	Design of Machine Elements	2	1	0	3	3
2	Production & Operations Management	3	0	0	3	3
3	Entrepreneurship and Start-ups	3	1	0	4	4
4	Open Elective - II	3	0	0	3	3
5	Open Elective - III	3	0	0	3	3
6	Indian Constitution	2	0	0	2	0
7	Major Project	0	0	6	6	3
8	Seminar	1	0	0	1	1
	Total				25	20

Total Credits for Diploma – 120

<u>List of Programme Electives Courses</u>

S. No	Course Title
1	Tool Engineering
2	Computer Integrated Manufacturing
3	Computer Aided Design and Manufacturing
4	Industrial Robotics & Automation
5	Heat Transfer
6	Refrigeration & Air-conditioning
7	Automobile Engineering
8	Power Plant Engineering
9	Farm Equipment & Farm Machinery
10	Material Handling Systems
11	Hybrid Vehicles
12	Mechatronics