

COURSE STRUCTURE

DIPLOMA IN MECHANICAL ENGINEERING (w.e.f. 2024 Onwards)



Department of Mechanical Engineering
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FIRST SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DMA101	Mathematics-I	2	1	0	3	3
2.	DPH101	Applied Physics-I	2	1	0	3	3
3.	DCH101	Applied Chemistry	2	1	0	3	3
4.	DHS101	Communication Skills in English	2	0	0	2	2
5.	DME201	Engineering Workshop Practice	0	0	3	3	1.5
6.	DME202	Engineering Drawing	0	0	3	3	1.5
7.	DPH201	Applied Physics –I Lab	0	0	2	2	1
8.	DCH201	Applied Chemistry Lab	0	0	2	2	1
9.	DGE201	Sports and Yoga	0	0	2	2	1
10.	DHS201	Communication Skills in English Lab	0	0	2	2	1
Total						25	18

SECOND SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DMA102	Mathematics-II	3	1	0	4	4
2.	DPH102	Applied Physics-II	2	1	0	3	3
3.	DCS101	Introduction to IT Systems	2	0	0	2	2
4.	DEC101	Fundamentals of Electrical & Electronics Engineering	2	1	0	3	3
5.	DME101	Engineering Mechanics	2	1	0	3	3
6.	DPH202	Applied Physics – II Lab	0	0	2	2	1
7.	DCS201	Introduction to IT Systems Lab	0	0	4	4	2
8.	DEC201	Fundamentals of Electrical & Electronics Engineering Lab	0	0	2	2	1
9.	DME203	Engineering Mechanics Lab	0	0	2	2	1
10.	DGE001	Environmental Science	2	0	0	2	0
Total						27	20

THIRD SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DME102	Basic Mechanical Engineering	3	1	0	4	4
2.	DME103	Computer Aided Machine Drawing Practice	0	0	2	2	1
3.	DME104	Material Science & Engineering	3	0	0	3	3
4.	DME105	Fluid Mechanics & Hydraulic Machinery	2	1	0	3	3
5.	DME106	Manufacturing Engineering	3	0	0	3	3
6.	DME107	Thermal Engineering-I	3	0	0	3	3
7.	DME204	Manufacturing Engineering Lab-I	0	0	2	2	1
8.	DME205	Fluid Mechanics & Hydraulic Machinery Lab	0	0	2	2	1
9.	DME206	Thermal Engineering Lab-I	0	0	2	2	1
10.	DME001	Summer Internship - I	0	0	0	0	0
Total						24	20

FOURTH SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DME108	Measurements & Metrology	2	1	0	3	3
2.	DME109	Strength of Materials	3	1	0	4	4
3.	DME110	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.	DME207	Material Testing Lab	0	0	2	2	1
7.	DME208	Measurements & Metrology Lab	0	0	2	2	1
8.	DME209	Thermal Engineering Lab - II	0	0	2	2	1
9.	DME210	Minor Project	0	0	2	2	1
10.	DHS001	Essence of Indian Knowledge and Tradition	2	0	0	2	0
Total						26	20

FIFTH SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DME111	Advanced Manufacturing Processes	3	0	0	3	3
2.	DME112	Theory of Machines & Mechanisms	2	1	0	3	3
3.	DME113	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.	DME211	CAD/CAM Lab	0	0	2	2	1
8.	DME212	Manufacturing Engineering Lab-II	0	0	2	2	1
9.	DME002	Summer Internship – II	0	0	0	0	0
10.	DME213	Major Project-Part 1	0	0	4	4	2
Total						26	22

SIXTH SEMESTER

Sl. No	Course Codes	Course Title	Hours per week			Total contact hrs/ week	Credits
			L	T	P		
1.	DME114	Design of Machine Elements	2	1	0	3	3
2.	DME115	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.	DME213	Major Project-Part 2	0	0	6	6	3
8.	DME214	Seminar	1	0	0	1	1
Total						25	20

Total Credits for Diploma – 120

List of Programme Electives Courses

S. No	Course Code	Course Title
1	DME301	Tool Engineering
2	DME302	Computer Integrated Manufacturing
3	DME303	Computer Aided Design and Manufacturing
4	DME304	Industrial Robotics & Automation
5	DME305	Heat Transfer
6	DME306	Refrigeration & Air-conditioning
7	DME307	Automobile Engineering
8	DME308	Power Plant Engineering
9	DME309	Farm Equipment & Farm Machinery
10	DME310	Material Handling Systems
11	DME311	Hybrid Vehicles
12	DME312	Mechatronics