



BRAINWARE UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF MECHANICAL ENGINEERING
Diploma in Mechanical Engineering - 2025

Mandatory Induction Program (Duration: 3 weeks)

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Department/Branch and Innovations

SEMESTER – I

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DBS00001	Mathematics-I	3	0	0	40	60	100	3	BS
2	DBS00002	Applied Physics-I	2	1	0	40	60	100	3	BS
3	DBS00003	Applied Chemistry	3	0	0	40	60	100	3	BS
4	DES00001	Introduction to IT Systems	2	0	0	40	60	100	2	ES
5	DHS00001	Communication Skills in English	2	0	0	40	60	100	2	HS
6	DBS09006	Applied Physics-I Lab	0	0	2	20	30	50	1	BS
7	DBS09007	Applied Chemistry Lab	0	0	2	20	30	50	1	BS
8	DES09010	Introduction to IT Systems Lab	0	0	2	20	30	50	1	ES
9	DES09009	Engineering Graphics	0	0	3	40	60	100	1.5	ES
10	DES09007	Engineering Workshop Practice	0	0	3	40	60	100	1.5	ES
TOTAL			12	1	12	340	510	850	19	

SEMESTER – II

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DBS00004	Mathematics-II	3	1	0	40	60	100	4	BS
2	DBS00005	Applied Physics-II	2	1	0	40	60	100	3	BS
3	DES00002	Fundamentals of Electrical and Electronics Engineering	3	0	0	40	60	100	3	ES
4	DES00003	Engineering Mechanics	3	1	0	40	60	100	4	ES
5	DES00004	Computer Programming	3	0	0	40	60	100	3	ES
6	DBS09008	Applied Physics-II Lab	0	0	2	20	30	50	1	BS
7	DES09008	Fundamentals of Electrical and Electronics Engineering lab	0	0	2	20	30	50	1	ES
8	DES09005	Engineering Mechanics Lab	0	0	2	20	30	50	1	ES
9	DES09006	Computer Programming Lab	0	0	2	20	30	50	1	ES
10	DHS09002	Communication Skills in English Lab	0	0	2	20	30	50	1	HS
11	DAU00001	Environmental Sciences	2	0	0	0	0	0	0	AU
TOTAL			16	3	10	300	450	750	22	



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SEMESTER – III

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DME30101	Design of Machine Elements	3	0	0	40	60	100	3	PC
2	DME30102	Manufacturing Engineering	3	0	0	40	60	100	3	PC
3	DME30103	Thermal Engineering-1	3	0	0	40	60	100	3	PC
4	DME30104	Strength of Materials	3	1	0	40	60	100	4	PC
5	DME30105	Materials Science and Engineering	3	0	0	40	60	100	3	PC
6	DME30106	Theory of Machines and Mechanisms	3	1	0	40	60	100	4	PC
7	DME39107	Manufacturing Engineering Lab	0	0	3	40	60	100	1.5	PC
8	DME39108	Materials Science and Engineering Lab	0	0	3	40	60	100	1.5	PC
TOTAL			18	2	6	320	480	800	23	

SEMESTER – IV

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DME40109	Fluid Mechanics and Machinery	3	0	0	40	60	100	3	PC
2	DME40110	Thermal Engineering – II	3	1	0	40	60	100	4	PC
3	DME40111	Advanced Manufacturing Process	3	0	0	40	60	100	3	PC
4	DME40201	A. Refrigeration and Air-conditioning B. Industrial Robotics and Automation C. Computer Aided Design and Manufacturing D. Automobile Engineering	4	0	0	40	60	100	4	PE
5	DHS00003	Entrepreneurship and Start-ups	3	0	0	40	60	100	3	HS
6	DME49112	Fluid Mechanics and Machinery Lab	0	0	2	20	30	50	1	PC
7	DME49113	Thermal Engineering - II Lab	0	0	3	40	60	100	1.5	PC
8	DME49114	Advanced Manufacturing Process Lab	0	0	3	40	60	100	1.5	PC
9	DAU00003	Essence of Indian Knowledge and Tradition	2	0	0	0	0	0	0	AU
TOTAL			18	1	8	300	450	750	21	



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SEMESTER – V

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DME50115	Metrology and Measurements	3	1	0	40	60	100	4	PC
2	DME50202	A. Heat Transfer B. Power Plant Engineering C. Mechatronics D. Tool Engineering	4	0	0	40	60	100	4	PE
3	DME50203	A. Material Handling Systems B. Computer Integrated Manufacturing C. Hybrid Vehicles D. Total Quality Management	4	0	0	40	60	100	4	PE
4	DME50301	A. Operations Research B. Engineering Economics and Accountancy C. Economic Policies in India	3	0	0	40	60	100	3	OE
5	DME59116	Metrology and Measurements Lab	0	0	2	40	60	100	1	PC
6	DME59117	Machine Drawing Lab	0	0	3	40	60	100	1.5	PC
7	DME59118	Strength of Materials Lab	0	0	3	40	60	100	1.5	PC
8	DME58101	Internship	0	0	0	0	100	100	2	PROJ
9	DME58102	Minor Project	0	0	0	40	60	100	2	PROJ
TOTAL			14	1	8	320	580	900	23	

SEMESTER – VI

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total	Credits	Course Type
						CIA	TEE			
1	DME60119	Production Management	3	0	0	40	60	100	3	PC
2	DME60302	A. Renewable Energy B. Artificial Intelligence and Machine Learning C. Energy Conservation and Audit	3	0	0	40	60	100	3	OE
3	DME60303	A. Additive Manufacturing B. Virtual Reality C. Internet of Things	3	0	0	40	60	100	3	OE
4	DME69120	Product, Process and Design analysis	0	0	2	20	30	50	1	PC
5	DME68103	Major Project	0	0	0	40	60	100	4	PROJ
6	DME68104	Grand Viva-Voce	0	0	0	0	100	100	3	PROJ
7	DAU00002	Indian Constitution	2	0	0	0	0	0	0	AU
TOTAL			11	0	2	180	370	550	17	