BRAINWARE UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF MECHANICAL ENGINEERING
DIPLOMA IN MECHANICAL ENGINEERING-2023

Mandatory Induction Program (Duration: 1 week)

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

Different components of Mandatory Induction Program will be implemented as per the guidelines of Regulatory Bodies.

Semester I

Course Code		Course Name	Course Type	Hours per week			Credits	Total Marks
				L	T	P		
HS101		Communication Skills in English	HS	2	0	0	2	50
BS101		Applied Chemistry	BS	3	0	0	3	100
BS102		Mathematics-I	BS	3	0	0	3	100
ES101		Introduction to IT Systems	ES	3	0	0	3	100
ES102		Engineering Mechanics	ES	3	0	0	3	100
Practical								
HS191		Communication Skills in English Lab	HS	0	0	2	1	50
BS191		Applied Chemistry lab	BS	0	0	3	1.5	100
ES191		Introduction to IT Systems	ES	0	0	2	1	50
ES192		Engineering Mechanics Lab	ES	0	0	2	1	50
ES193		Engineering Workshop Practice	ES	0	0	3	1.5	100
Total							**20**	**800**
MC	AU-1	Yoga and Sport		0	0	1	0	0

Total Hours=27

Semester II

Course Code	Course Name	Course Type	Hours per week			Credits	Total Marks
			L	T	P		
BS201	Applied Physics	BS	3	0	0	3	100
BS202	Mathematics-II	BS	3	1	0	4	100
ES201	Fundamentals of Electrical & Electronics Engineering	ES	3	0	0	3	100
ES202	Computer Programming	ES	3	0	0	3	100
Practical							
BS291	Applied Physics Lab	BS	0	0	3	1.5	100
ES291	Fundamentals of Electrical & Electronics Engineering Lab	ES	0	0	2	1	50
ES292	Computer Programming Lab	ES	0	0	2	1	50
ES293	Engineering Graphics	ES	0	0	3	1.5	100
Total						**18**	**700**
MC	AU-2	Environmental Science		2	0	0	0	0

Total Hours=25

Semester III

Course Code	Course Name	Course Type	Hours per week			Credits	Total Marks
			L	T	P		
DMEPC301	Basic Mechanical Engineering	PC	3	0	0	3	100
DMEPC302	Strength of Materials	PC	3	0	0	3	100
DMEPC303	Materials Science & Engineering	PC	3	0	0	3	100
DMEPC304	Thermal Engineering-1	PC	3	0	0	3	100
DMEPC305	Manufacturing Engineering	PC	3	0	0	3	100
Practical							
DMEPC391	Material Testing Lab	PC	0	0	3	1.5	100
DMEPC392	Manufacturing Engineering Lab-I	PC	0	0	3	1.5	100
DMEPC393	Thermal Engineering Lab-I	PC	0	0	2	1	50
	Total					**19**	**750**

Total hours=23

Semester IV

Course Code	Course Name	Course Type	Hours per week			Credits	Total Marks
			L	T	P		
DMEPC401	Theory of Machines & Mechanisms	PC	3	0	0	3	100
DMEPC402	Fluid Mechanics & Machinery	PC	3	0	0	3	100
DMEPC403	Thermal Engineering - II	PC	3	0	0	3	100
DMEPE401	Elective-I A. Refrigeration & Air-conditioning B. Industrial Robotics & Automation	PE	3	0	0	3	100
DMEOE402	Open Elective-I A. Operations Research B. Engineering Economics & Accountancy	OE	3	0	0	3	100
Practical							
DMEPC491	Theory of Machines & Mechanisms Lab	PC	0	0	3	1.5	100
DMEPC492	Applied Fluid Mechanics & Machinery Lab	PC	0	0	3	1.5	100
DMEPC493	Thermal Engineering lab-II	PC	0	0	3	1.5	100
DMEPROJ481	Internship -I/ Industrial training-I	PR	0	0	0	2	100
	Total					21.5	900
MC AU-3	Essence of Indian Knowledge and Tradition		1	0	0	**0**	**0**

Total Hours=25

Semester V

Course Code		Course Name	Course Type	Hours per week			Credits	Total Marks
				L	T	P		
DMEPC501		Advanced Manufacturing Process	PC	3	0	0	3	100
DMEPC502		Measurements & Metrology	PC	3	0	0	3	100
DMEPC503		Industrial Engineering & Management	PC	3	0	0	3	100
DMEPE501		Elective-II A. Heat Transfer B. Power Plant Engineering	PE	3	0	0	3	100
Practical								
DMEPC591		Manufacturing Engineering Lab-II	PC	0	0	3	1.5	100
DMEPC592		Measurements & Metrology Lab	PC	0	0	2	1	50
DMEPROJ581		Industrial Project I	PR	0	0	0	2	100
DMEPROJ582		Internship-II/ Industrial training-II	PR	0	0	0	2	100
		Total					**18.5**	**750**
MC	AU-4	Technical Grooming		1	0	0	**0**	**0**

Total hours=18

Semester VI

Course Code		Course Name	Course Type	Hours per week			Credits	Total Marks
				L	T	P		
DMEPC601		Design of Machine Elements	PC	3	0	0	3	100
DMEPC602		Power Engineering	PC	3	0	0	3	100
DMEPE601		Elective-III A. Material Handling Systems B. Computer Integrated Manufacturing	PE	3	0	0	3	100
DMEPE602		Elective-IV A. Mechatronics B. Hybrid Vehicles	PE	3	0	0	3	100
DMEOE601		Open Elective II A. Renewable Energy B. Product Design	OE	3	0	0	3	100
		Practical						
DMEPROJ681		Industrial Project II	PR	0	0	0	4	100
DMEPROJ682		Grand Viva	PR	0	0	0	2	100
DMEROPJ683		Technical Seminar	PR	0	0	0	2	100
			Total				**23**	**800**
MC	AU-5	Constitution of India		1	0	0	**0**	**0**

Total hours=16

Total Credit -120 Total marks -4700