



BRAINWARE UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF MECHANICAL ENGINEERING
DIPLOMA IN MECHANICAL ENGINEERING-2022

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



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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



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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



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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



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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