

B.E. MECHANICAL ENGINEERING
REGULATIONS 2023
CURRICULUM AND SYLLABUS
(Choice Based Credit System)

SEMESTER I

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	HS23111	Technical Communication I	HS	2	2	0	0	2
2	MA23112	Algebra and Calculus	BS	4	3	1	0	4
3	GE23111	Engineering Graphics	ES	6	2	0	4	4
4	EC23111	Basic Electronics Engineering	ES	3	3	0	0	3
5	GE23117	தமிழர் மரபு / Heritage of Tamils	HS	1	1	0	0	1
LAB INTEGRATED THEORY								
6	PH23131	Physics of Materials	BS	5	3	0	2	4
PRACTICALS								
7	GE23121	Engineering Practices - Civil and Mechanical	ES	2	0	0	2	1
NON-CREDIT - MANDATORY COURSE								
8	MC23112	Environmental Science and Engineering	MC	3	3	0	0	0
TOTAL				26	17	1	8	19

SEMESTER II

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	HS23221/ HS23222	Technical Communication II / English for Professional Competence	HS	2	0	0	2	1
2	MA23212	Differential Equations and Complex variables	BS	4	3	1	0	4
3	GE23211	Engineering Mechanics	ES	3	2	1	0	3
4	GE23217	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	HS	1	1	0	0	1
LAB INTEGRATED THEORY								
5	CY23233	Engineering Chemistry	BS	5	3	0	2	4
6	EE23132	Basic Electrical Engineering	ES	5	3	0	2	4
7	GE23233	Problem solving and Python Programming	ES	6	2	0	4	4
PRACTICALS								
8	GE23122	Engineering Practices- Electrical and Electronics	ES	2	0	0	2	1
NON-CREDIT - MANDATORY COURSE								
9	MC23111	Indian Constitution and Freedom Movement	MC	3	3	0	0	0
TOTAL				30	18	2	10	22

SEMESTER-III

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	ME23311	Engineering Thermodynamics	PC	4	3	1	0	4
2	ME23312	Manufacturing Technology I	PC	3	3	0	0	3
3	ME23313	Kinematics of Machinery	PC	3	3	0	0	3
LAB INTEGRATED THEORY								
4	MA23331	Transforms and Statistics	BS	5	3	0	2	4
5	ME23331	Strength of Materials	PC	5	3	0	2	4
PRACTICALS								
6	ME23321	Manufacturing Technology Laboratory I	PC	2	0	0	2	1
7	CS23422	Python Programming for Machine learning	ES	4	0	0	4	2
TOTAL				26	15	1	10	21

SEMESTER-IV

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	ME23411	Engineering Materials and Metallurgy	PC	3	3	0	0	3
2	ME23412	Manufacturing Technology II	PC	3	3	0	0	3
LAB INTEGRATED THEORY								
3	ME23431	Dynamics of Machines	PC	5	3	0	2	4
4	ME23432	Fluid Mechanics and Machinery	PC	5	3	0	2	4
5	ME23433	Thermal Engineering	PC	5	3	0	2	4
PRACTICALS								
6	GE23421	Soft Skills - I	EEC	2	0	0	2	1
7	ME23421	Computer Aided Machine Drawing Laboratory	PC	4	0	0	4	2
8	ME23422	Manufacturing Technology Laboratory II	PC	4	0	0	4	2
TOTAL				31	15	0	16	23

SEMESTER-V

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	GE23511	Economics for Engineers	HS	3	3	0	0	3
2	ME23511	Machine Design	PC	3	3	0	0	3
3		Professional Elective-I	PE	3	3	0	0	3
4		Open Elective - I	OE	3	3	0	0	3
LAB INTEGRATED THEORY								
5	ME23531	Heat and Mass Transfer	PC	5	3	0	2	4
6	ME23532	Metrology and Measurements	PC	5	3	0	2	4
PRACTICALS								
7	GE23521	Soft Skills - II	EEC	2	0	0	2	1
8	ME23521	Component Modeling Laboratory	PC	4	0	0	4	2
9	ME23522	Industrial Training Internship	EEC	2	0	0	2	1
TOTAL				30	18	0	12	24

SEMESTER-VI

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	ME23611	Additive Manufacturing	PC	3	3	0	0	3
2	ME23612	Design of Transmission systems	PC	3	3	0	0	3
3	ME23613	Finite Element Analysis	PC	3	3	0	0	3
4	ME23614	Total Quality Management	PC	3	3	0	0	3
5		Professional Elective II	PE	3	3	0	0	3
6		Open Elective – II	OE	3	3	0	0	3
LAB INTEGRATED THEORY								
7	ME23631	Robotics Laboratory	PC	3	1	0	2	2
PRACTICALS								
8	GE23621	Problem Solving Techniques	EEC	2	0	0	2	1
9	ME23622	Simulation and Analysis Laboratory	PC	3	0	0	3	2
10	ME23623	Innovation and Design thinking for Mechanical Engineer	EEC	3	0	0	3	2
TOTAL				29	19	0	10	25

SEMESTER-VII

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1	ME23711	Process Planning and Cost Estimation	PC	3	3	0	0	3
2		Professional Elective III	PE	3	3	0	0	3
3		Professional Elective IV	PE	3	3	0	0	3
LAB INTEGRATED THEORY								
4	ME23731	Artificial Intelligence for Mechanical Engineers	PC	6	2	0	4	4
5	ME23732	Mechatronics	PC	5	3	0	2	4
PRACTICALS								
6	ME23721	Comprehension	EEC	2	0	0	2	1
7	ME23723	Project Phase I	EEC	2	0	0	2	1
TOTAL				24	14	0	10	19

SEMESTER-VIII

S.No.	Course Code	Course Title	Category	Contact Periods	L	T	P	C
THEORY								
1		Professional Elective V	PE	3	3	0	0	3
PRACTICAL								
2	ME23821	Project work	EEC	18	0	0	18	9
TOTAL				21	3	0	18	12

Total Credits : 165

Summary of Credits:

CATEGORY	I	II	III	IV	V	VI	VII	VIII	Credits	(%)
BS	8	8	4						20	12%
HS	3	2			3				8	5%
ES	8	12	2						22	13%
PC			15	22	13	16	11		77	47%
PE					3	3	6	3	15	9%
EEC				1	2	3	2	9	17	10%
OE					3	3			6	4%
Non-Credit*/(Mandatory)	0	0							0	0%
TOTAL	19	22	21	23	24	25	19	12	165	100%