

M.Tech. in MECHANICAL ENGINEERING
STREAM: MECHANICAL DESIGN
2026 Batch

Semester 1

S.N o	Course No	Course Name	L	T	E	P	O	C
1	ME5201	Computational methods in engineering	3	1	0	0	6	10
2	ME5203	Advanced mechanics of solids	3	0	0	0	6	9
3	ME5205	Theory of vibration	3	0	0	0	6	9
4	ME5401/ ME	Data Science for Mechanical Engineering/Professional Elective 1	3	1	0	0	6	10/ 9
5		Professional elective 1	3	0	0	0	6	9
6	ME5281	Mechanical design lab	0	0	0	3	0	3
7	GN5003	Personal and Professional Growth	1	0	0	0	2	0
	GN1001	Posh Training I	3	0	0	0	0	0
		Credits for semester 1						49/ 50

Semester 2

S.N o	Course No	Course Name	L	T	E	P	O	C
1	ME5204	Finite element analysis	3	0	0	0	6	9
2	ME5207	Design with Advanced Engineering Materials	3	0	0	0	6	9
3	ME5280	Design Practice with CAD Tools	1	0	0	3	2	6
4		Professional elective III	3	0	0	0	6	9
5		Professional elective IV	3	0	0	0	6	9
		Free Elective/ Professional elective V	3	0	0	0	6	9
6	ME5020	Professional Communication Skills	1	1	0	0	1	3
		Credits for semester 2						54

SUMMER

S.N o	Course No	Course Name	L	T	E	P	O	C
1	ME6296	Project Phase I	0	0	0	0	20	20
		Total Credits						20

Semester 3

S.N o	Course No	Course Name	L	T	E	P	O	C
1	ME6297	Project Phase II	0	0	0	0	35	35
		Total Credits :						35

Semester 4

S.N o	Course No	Course Name	L	T	E	P	O	C
1	ME6298	Project Phase III	0	0	0	0	40	40
		Total Credits :						40

Semester	1	2	Summer	3	4	Total
Credits	49/50	54	20	35	40	198/199

LIST OF ELECTIVES

BASKET OF DESIGN ELECTIVES (Professional Elective II) FOR MANUFACTURING AND THERMAL STREAM:

ME5203: Advanced Mechanics of Solids

ME5205: Theory of Vibration

ME5204: Finite Element Analysis

BASKET OF ELECTIVES (Professional Elective II) FOR DESIGN STUDENTS

ME5301 Advanced Materials Processing and Characterization

ME5307 Modeling and Simulation in Manufacturing

ME5309 Mechatronics Systems for Manufacturing

ME5101 Advanced Heat and Mass Transfer

ME5103 Incompressible Fluid Flow

ME5105 Applied Thermodynamics