



Sandip University

Mahiravani, Trimbak Road, Nashik – 422 213

School of Engineering and Technology

Department of Mechanical Engineering

M. Tech. in Mechanical Engineering,

Semester -I

Batch -2024, Regulation -2017

Proposed Syllabus

Sr. No.	Code	Course Code	Course Name	Teaching Scheme				Examination Scheme				Total Marks
				(Hrs/Week)				Formative		Summative Assessment ESE		
								Assessment				
								CIA				
				L	T	P	C	Course	Lab	Cour se	Lab	
1	PC	PMT106	Transforms, Calculus of Variations and Reliability	4	--	--	4	50	--	100	--	150
2	PC	PME102	Design for Manufacturing, Assembly, and Environment	4	--	--	4	50	--	100	--	150
3	PC	PME103	Mechatronics	4	--	--	4	50	--	100	--	150
4	PC	17RDP101	Research Methodology	4	--	--	4	50	--	100	-	150
5	PE	PMEE-01/02/03	Elective -I	4	--	--	4	50	--	100	--	150
6	PC	PME 111	Laboratory Practice -I	--	--	4	2	--	50		50	100
7	PC	PME 112	Seminar-I			2	1		50		50*	100
				20	--	06	23	250	100	500	100	950

Notations: **TH**-Theory, **PR**-Practical

CIA: Continues Internal Assessment L: Theory lecture T: Tutorial P: Practical	TH: Theory exam *: Oral Exam PC: Program Core PE: Program Elective
--	---

Elective-I(Any one)
PMEE 01 - Industrial Hydraulics and Automation
PMEE 02 – Artificial Intelligence and Machine Learning
PMEE 03 - Design of Mechanical Transmission Systems

Details of Continuous Internal Assessment (CIA)

CIA	Weightage	Description
CIA -1	10%	Home Assignment
CIA -2	20%	Mid- Term Exam
CIA -3	10%	Presentation by Students
CIA -4	10%	Research Based Activity
Total	50%	





Sandip University

Mahiravani, Trimbak Road, Nashik – 422 213

School of Engineering and Technology

Department of Mechanical Engineering

M. Tech. in Mechanical Engineering, Semester -II

Batch -2024, Regulation -2017

Proposed Syllabus

Sr. No.	Code	Course Code	Course Name	Teaching Scheme				Examination Scheme				Total Marks
				(Hrs/Week)				Formative		Summative Assessment ESE		
								Assessment				
								CIA				
L	T	P	C	Course	Lab	Course	Lab					
1	PC	PME201	Product Design and Development	4	--	--	4	50	--	100	--	150
2	PC	PME202	Synthesis and Analysis of Mechanisms	4	--	--	4	50	--	100	--	150
3	PC	PME203	Optimization Techniques for Engineering Design	4	--	--	4	50	--	100	--	150
4	PC	PME204	Integrated Automation	4	--	--	4	50	--	100	--	150
5	PE	PMEE-04/05 PDE201	Elective II	4	--	--	4	50	--	100	--	150
6	PC	PME211	Laboratory Practice -II	--	--	4	2	--	50	--	50	100
7	PC	PME212	Seminar-II	--		2	1	--	50	--	50*	100
				20	--	06	23	250	100	500	100	950

Notations: TH-Theory, PR-Practical.

Elective-II(Any one)
PMEE 04 - Design of Refrigeration and Air Conditioning Systems
PMEE 05 - Mechatronics System Design
PDE201 - Quality Control & Reliability

Details of Internal Continuous Assessment (CIA)

CIA	Weightage	Description
CIA -1	10%	Home Assignment
CIA -2	20%	Mid-Term Exam
CIA -3	10%	Presentation by Students
CIA -4	10%	Research-Based Activity
Total	50%	

CIA: Continues Internal Assessment L: Theory lecture T: Tutorial P: Practical	TH: Theory exam *: Oral Exam PC: Program Core PE : Program Elective
--	--



Department of Mechanical Engineering

**Course Structure for Post Graduate Programme of Master of
Technology (Mechanical Engineering)
Semester– III**

Sr. No	Cod e	Course Code	Theory Paper/Practical	Teaching Scheme (Hrs/Week)				C	Duration of University Exam. (Hrs.)	Form active CIA	Summative		Total Marks
				L	T	P	T ot al				TH	OR / PR	
1	P C	PME311	Presentation Stage-I	--	--	10	10	10	03	50	--	50	100
2	P C	PME312	Presentation Stage-II	--	--	10	10	10	03	50	--	50	100
Total				--	--	20	20	20	--	100	--	100	200

CIA: Continuous Internal Assessment L:
Theory Lecture
T: Tutorial
P: Practical

TH: Theory Exam.
***: Oral Examination PC:**
Programme Core

Details of Continuous Internal Assessment (CIA)

CIA	Weightage	Description
CIA 1	10%	Home Assignment
CIA 2	20%	Mid-Term Exam (MTE)
CIA 3	10%	Presentation by students
CIA 4	10%	Research Based Activity
TOTAL	50%	



Sandip University

Mahiravani, Trimbak Road, Tal & Dist. Nashik 422213, Maharashtra
Phone: 02594-222541, 222582 Fax: 02594 222555

School of Engineering and Technology Department of Mechanical Engineering

Course Structure for Post Graduate Programme of Master of Technology (Mechanical Engineering) Semester– IV

Sr. No	Code	Course Code	Theory Paper/Practical	Teaching Scheme (Hrs/Week)				C	Duration of University Exam. (Hrs.)	Formative CIA	Summative		Total Marks
				L	T	P	Total				TH	OR / PR	
1	PC	PME411	Presentation Stage-III	--	--	10	10	10	03	50	--	50	100
2	PC	PME412	Final Presentation and Viva Voce	--	--	10	10	10	03	100	--	100	200
Total				--	--	20	20	20	--	150	--	150	300

CIA: Continuous Internal Assessment L:
Theory Lecture
T: Tutorial
P: Practical

TH: Theory Exam.
***: Oral Examination PC:**
Programme Core

Details of Continuous Internal Assessment (CIA)

CIA	Weightage	Description
CIA 1	10%	Home Assignment
CIA 2	20%	Mid-Term Exam (MTE)
CIA 3	10%	Presentation by students
CIA 4	10%	Research Based Activity
TOTAL	50%	