

1. Abbreviations

Course Categories as per AICTE

BS: Basic Science

EC: Engineering Science

PC: Programme Core Course

PE: Programme Elective

OE: Open Elective

HS: Humanities Social Science and Management

CC: Co-curricular Courses

PR: Project Work

IN: Internship

Course Sub-categories as per Maharashtra state NEP

MDM: Multidisciplinary Minor

VSEC: Vocational and Skill Enhancement Course

AEC: Ability Enhancement Course

IKS: Indian Knowledge System

VEC: Value Education Course

CEP: Comm. Engg. Project

FP: Field Project

2. Course Code

ME	1	2	0	1	T
Offering Academic Unit (Dept/Centre of Excellence)	Year	Revision number	Course Number		Course Component

S. Y. B. Tech (Mechanical Engineering)

Curriculum Pattern: 2025

Semester III - (Level 5 - UG-Diploma/ Diploma-Eng)

S.N.	Course Category (Course Subcategory)	Course Code	Course title	Teaching Scheme, Classroom Contact hr/week (contact hr/semester)			Self-learning (contact hr/semester)	Total Classroom Contact hr/week (contact hr/semester)	Credit (Total contact of semester /30)	Examination scheme (Marks)				
										Continuous Assessment			Semester End Examination	Total Marks
				L	T	P				TA1	MSE	TA2	ESE	
1	ES	ES2301T	Differential Equations and Vector Calculus	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
2	ES	ME2301L	Introduction to Python for Programming and Data Science	0 (0)	0 (0)	4 (40)	- (20)	4 (60)	2	20	20	20	40	100
3	HS (VSEC)	HS2301T	Universal Human Values and Professional Ethics	2 (30)	1 (15)	0 (0)	- (45)	3 (90)	3	25*	20*	25	30	100
4	PC	ME2302T	Introduction to Materials Science & Engineering	3 (45)	0 (0)	0 (0)	- (45)	3 (90)	3	10	30	10	50	100
5	PC	ME2302L	Materials Science & Engineering Lab	0 (0)	0 (0)	2 (20)	- (10)	2 (30)	1	10	10	10	20	50
6	PC	ME2303T	Solid Mechanics	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
7	PC	ME2304T	Engineering Thermodynamics	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
Total								24 (630)	21	360			290	650

Note: all marked are scaled down marks

TA1: Teacher's Assessment 1, TA2: Teacher's Assessment 2, MSE: Mid Semester Examination, ESE: End Semester Examination

*No pan and panicle

S. Y. B. Tech (Mechanical Engineering)

Curriculum Pattern: 2025

Semester IV - (Level 5 - UG-Diploma/ Diploma-Eng)

S.N.	Course Category (Course Subcategory)	Course Code	Course title	Teaching Scheme, Classroom Contact hr/week (contact hr/semester)			Self-learning (contact hr/semester)	Total Classroom Contact hr/week (contact hr/semester)	Credit (Total contact of semester /30)	Examination scheme (Marks)				
										Continuous Assessment			Semester End Examination	Total Marks
				L	T	P				SL	Hr	C	TA1	
1	ES	ES2303L	Computational Mathematics Laboratory	0 (0)	0 (0)	4 (40)	- (20)	4 (60)	2	20	20	20	40	100
2	CC	CCA2301L	Extra-Curricular	0 (0)	0 (0)	2 (20)	- (10)	2 (30)	1	10	10	10	20	50
3	PR (MDM)	ME2305L	Design Thinking and Innovation Lab	0 (0)	0 (0)	4 (40)	- (20)	4 (60)	2	20	20	20	40	100
4	PC	ME2306T	Manufacturing Technology-I	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
5	PC	ME2307T	Theory of Machines	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
6	PC	ME2308T	Fluid Mechanics	3 (45)	1 (15)	0 (0)	- (60)	4 (120)	4	10	30	10	50	100
7	PC	ME2309T	Principles of Automation and Robotics	3 (45)	0 (0)	0 (0)	- (45)	3 (90)	3	10	30	10	50	100
8	PC	ME2309L	Automation and Robotics Lab	0 (0)	0 (0)	2 (20)	- (10)	2 (30)	1	10	10	10	20	50
9	PC	ME2310L	Machine Drawing Laboratory	0 (0)	0 (0)	4 (40)	- (20)	4 (60)	2	20	20	20	40	100
Total								31 (690)		440			360	800

Note: all marked are scaled down marks

TA1: Teacher's Assessment 1, TA2: Teacher's Assessment 2, MSE: Mid Semester Examination, ESE: End Semester Examination