

Savitribai Phule Pune University

Faculty of Science & Technology



Curriculum/Syllabus

For

Fourth Year

Bachelor of Engineering

(Choice Based Credit System)

Mechanical Engineering

(2019 Course)

Board of Studies – Mechanical and Automobile Engineering

(With Effect from Academic Year 2022-23)

Savitribai Phule Pune University
Board of Studies - Mechanical and Automobile Engineering
Undergraduate Program – Final Year Mechanical Engineering (2019 pattern)

Course Code	Course Name	Teaching Scheme (Hrs./week)			Examination Scheme and Marks						Credit			
		TH	PR	TUT	ISE	ESE	TW	PR	OR	TOTAL	TH	PR	TUT	TOTAL
Semester-VII														
402041	Heating Ventilation Air-Conditioning and Refrigeration	3	2	-	30	70	-	-	25	125	3	1	-	4
402042	Dynamics of Machinery	3	2	-	30	70	-	-	25	125	3	1	-	4
402043	Turbomachinery*	2	2	-	-	50	25	-	25	100	2	1	-	3
402044	Elective – III	3	-	-	30	70	-	-	-	100	3	-	-	3
402045	Elective - IV	3	-	-	30	70	-	-	-	100	3	-	-	3
402046	Data Analytics Laboratory	-	2	-	-	-	50	-	-	50	-	1	-	1
402047	Project (Stage - I)	-	4	-	-	-	50	-	50	100	-	2	-	2
402054	Audit Course VII ^s	-	-	-	-	-	-	-	-	-	-	-	-	NC
	Total	14	12	-	120	330	125	-	125	700	14	6	-	20
Semester-VIII														
402048	Computer Integrated Manufacturing	3	2	-	30	70	25	-	25	150	3	1	-	4
402049	Energy Engineering	3	2	-	30	70	25	-	25	150	3	1	-	4
402050	Elective - V	3	-	-	30	70	-	-	-	100	3	-	-	3
402051	Elective - VI	3	-	-	30	70	-	-	-	100	3	-	-	3
402052	Mechanical Systems Analysis Laboratory	-	2	-	-	-	25	-	25	50	-	1	-	1
402053	Project (Stage - II)	-	10	-	-	-	100	-	50	150	-	5	-	5
402055	Audit Course VIII ^s	-	-	-	-	-	-	-	-	-	-	-	-	NC
		12	16	-	120	280	175	-	125	700	12	8	-	20
Elective-III		Elective-V												
402044A	Automobile Design	402050A			Quality and Reliability Engineering									
402044B	Design of Heat Transfer Equipments	402050B			Energy Audit and Management									
402044C	Modern Machining Processes	402050C			Manufacturing Systems and Simulation									
402044D	Industrial Engineering	402050D			Engineering Economics and Financial Management									
402044E	Internet of Things	402050E			Organizational Informatics									
402044F	Computational Fluid Dynamics	402050F			Computational Multi Body Dynamics									
Elective-IV		Elective-VI												
402045A	Product Design and Development	402051A			Process Equipment Design									
402045B	Experimental Methods in Thermal Engineering	402051B			Renewable Energy Technologies									
402045C	Additive Manufacturing	402051C			Automation and Robotics									
402045D	Operations Research	402051D			Industrial Psychology and Organizational Behavior									
402045E	Augmented Reality and Virtual Reality	402051E			Electrical and Hybrid Vehicle									
Audit Courses														
402054A	Yoga Practices	402054B			Stress Management									
402055A	Managing Innovation	402055B			Operations Management									

Abbreviations: TH: Theory, PR: Practical, TUT: Tutorial, ISE: In-Semester Exam, ESE: End-Semester Exam, TW: Term Work, OR: Oral

- Student can select any elective subjects from the list given as per his/her choice. However, it is advised to select the subjects from within a group identified for specialization.