

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\$	-	-	-	-	-	-	-	-	-				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\$	-	-	-	-	-	-	-	-	-				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.