



# Punyashlok Ahilyadevi Holkar Solapur University, Solapur

## Faculty of Science and Technology

Credit System structure of Final Year B. Tech. Mechanical Engineering W.E.F. 2023-2024 [ Semester VII ]

### Semester VII - Theory Courses

Course code	Name of Theory Course	Hrs./week				Credits	Examination Scheme			
		L	T	P	D		ISE	ESE	ICA	Total
ME 411	Refrigeration and Air Conditioning	3	-	-	-	3	30	70	-	100
ME 412	Automobile Engineering	3	-	-	-	3	30	70	-	100
ME 413	Automation and Robotics	3	-	-	-	3	30	70	-	100
ME 414 P	Professional Elective-V	3	-	-	-	3	30	70	-	100
ME 415 O	Open Elective-I	3	-	-	-	3	30	70	-	100
	<b>Sub Total</b>	15	-	-	-	15	150	350	-	500

### Semester VII - Laboratory / Tutorial Courses

Course code	Name of Laboratory / Tutorial Course	Hrs./week				Credits	Examination Scheme				
		L	T	P	D		ISE	ESE		ICA	Total
								POE	OE		
ME 411	Refrigeration and Air Conditioning	-	-	2	-	1	-	-	25	25	50
ME 412	Automobile Engineering	-	-	2	-	1	-	-	25	25	50
ME 413	Automation and Robotics	-	-	2	-	1	-	-	-	25	25
ME 414 P	Professional Elective-V	-	-	2	-	1	-	-	-	25	25
ME 415 O	Open Elective-I	-	-	2	-	1	-	-	-	25	25
	Industrial Training	-	1	-	-	1	-	-	25	50	75
	Project Phase – I	-	-	4	-	2	-	-	-	50	50
	<b>Sub Total</b>	-	-	14	-	08	-	-	75	225	300
	<b>Grand Total</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>-</b>	<b>23</b>	<b>150</b>	<b>425</b>	<b>225</b>	<b>800</b>	

**Abbreviations:** L- Lectures, P –Practical, T- Tutorial, ISE- In-Semester Examination, ESE - End Semester Examination (University Examination for Theory & / POE & / Oral), ICA- Internal Continuous Assessment.

**Professional Elective – V:** A. Production and Operations Management, B. Artificial Intelligence & Machine Learning, C. Railway Systems Management D. Analysis and Synthesis of Mechanisms

**Open Elective – I:** A. Entrepreneurship Development, B. Operations Research, C. Research Methodology D. Supply Chain Management



# Punyashlok Ahilyadevi Holkar Solapur University, Solapur

## Faculty of Science and Technology

*Credit System structure of Final Year B. Tech. Mechanical Engineering W.E.F. 2023-2024 [ Semester VIII ]*

### Semester VIII – Courses

Course code	Name of Course	Hrs./week				Credits	Examination Scheme					
		L	T	P	D		ISE	ESE			ICA	Total
								Theory	POE	OE		
ME 421-A	Self-Learning Technical (MOOC/Swayam / NPTEL)	-	-	-	-	4	-	100*	-	-	-	100*
ME 421-B	Self Learning Technical Course offered by institute	-	-	-	-	4	-	100*	-	-	-	100*
ME 421-C	Apprenticeship/Internship	-	-	-	-	4	-	-	-	100*	-	100*
ME 422	Project Phase – II (Progress Presentation - I)	-	-	2	-	1	-	-	-	-	50	50
ME 423	Project Phase – III (Progress Presentation - II)	-	-	2	-	1	-	-	-	-	50	50
ME 424	Project Phase – IV (Report Submission & Final Presentation)	-	-	4	-	2	-	-	50	-	50	100
<b>Grand Total</b>						<b>08</b>		<b>100</b>			<b>150</b>	<b>300</b>

**Abbreviations:** L- Lectures, P –Practical, T- Tutorial, ISE- In Semester Examination, ESE - End Semester Examination (University Examination for Theory & / POE & / Oral), ICA- Internal Continuous Assessment.

\* Students shall opt for any one of the three courses (i.e. out of ME 421-A, ME 421-B and ME 421-C, students can select any one course for obtaining 4 credits of 100 marks).

**M421A-Self Learning Technical Course (MOOC/Swayam/NPTEL):**

- ESE 100 Marks, Credits: 4, transferrable from Online Examinations conducted by approved MOOC platform.

**M421B Self Learning Technical Course offered by institute:**

- ESE 100 Marks, Credits: 4, Course shall be designed by the Institute
- **Institute** level examination to be conducted by institute offering the course.

**M421C Apprenticeship/Internship (Self Learning):**

- Students shall opt for semester long internship/apprenticeship (minimum 60 days).
- ESE 100 Marks, Credits: 4 (Oral Examination based on the report of Apprenticeship/Internship)
- Apprenticeship/Internship may be of the following type:
  1. Offered by industry at their premises.
  2. Offered by industry at the institute campus.
  3. Offered by institute jointly with the industry.

