



**JSPM's**  
**RAJARSHI SHAHU COLLEGE OF ENGINEERING**  
**TATHAWADE, PUNE-33**  
(An Autonomous Institute Affiliated to Savitribai Phule Pune  
University, Pune)



**Final Year B. Tech (Automation and Robotics)**  
**Academic Year – 2024-2025 Semester – VII**

Course Code	Course	Teaching Scheme			Semester Examination Scheme of Marks						Credits
		TH	TU	LAB	Theory			TW	LAB	TOTAL	
					ISE (15)	MSE (25)	ESE (60)				
AR4101	Field and Service Robotics	3	0	2	15	25	60	-	25	125	4
AR4102	Augmented Reality and Virtual Reality for Robotics	3	0	2	15	25	60	-	25	125	4
AR4103	Elective –III	3	0	2	15	25	60	25	25	150	4
AR4104	Project Stage-I	0	0	12	-	-	-	100	100	200	6
Total of Semester-VII		<b>9</b>	<b>0</b>	<b>18</b>	<b>45</b>	<b>75</b>	<b>180</b>	<b>125</b>	<b>175</b>	<b>600</b>	<b>18</b>

**Elective – III**

Course Code	Course	Course Code	Course	Course Code	Course
AR4103A	Data Engineering for Robotics and Automation	AR4103B	Industry 4.0	AR4103C	AI and ML for Robotics

Dr. A. M. Badadhe  
BOS Chairman (A & R)

Dr. Ram Joshi  
Dean Academics

Dr. R. K. Jain  
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**Academic Year – 2024-2025 Semester – VIII**  
**TRACK - A - REGULAR**

Course Code	Course	Teaching Scheme			Semester Examination Scheme of Marks						Credits	
		TH	TU	LAB	Theory			TW	LAB	TOTAL		TOTAL
					ISE (15)	MSE (25)	ESE (60)					
AR4105	Mobile Robotics	3	0	0	15	25	60	-	-	100	3	
AR4106	Advance Robotics Applications	3	0	0	15	25	60	-	-	100	3	
AR4107	Elective –IV	3	0	2	15	25	60	25	25	150	4	
AR4108	Project Stage-II	0	0	16	-	-	-	150	100	250	8	
<b>Total of Semester-VIII</b>		<b>9</b>	<b>0</b>	<b>18</b>	<b>45</b>	<b>75</b>	<b>180</b>	<b>175</b>	<b>125</b>	<b>600</b>	<b>18</b>	

Course Code	Course	Course Code	Course	Course Code	Course
AR4107A	Cyber Security	AR4107B	Design of Mechatronics System	AR4107C	Micro-Electro Mechanicalsystems (MEMS)

**Final Year B. Tech (Automation and Robotics)**  
**Academic Year – 2024-2025 Semester – VIII**  
**TRACK- B - FULL SEMSTER INTERNSHIP**

Course Code	Course	Teaching Scheme			Semester Examination Scheme of Marks						Credits	
		TH	TU	LAB	Theory			TW	LAB	TOTAL		TOTAL
					ISE (15)	MSE (25)	ESE (60)					
AR4109	Industrial Internship/ Research Internship	0	0	20	-	-	-	200	150	350	10	
AR4108	Project Stage- II	-	-	16	-	-	-	150	100	250	8	
<b>Total of Semester-VIII</b>		<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>350</b>	<b>250</b>	<b>600</b>	

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**Final Year B. Tech (Automation and Robotics)**  
**Academic Year – 2024-2025 Semester – VIII**  
**TRACK - C - HIGHER STUDIES AND RESEARCH**

Course Code	Course	Teaching Scheme			Semester Examination Scheme of Marks						Credits
		TH	TU	LAB	Theory			TW	LAB	TOTAL	TOTAL
					ISE (15)	MSE (25)	ESE (60)				
AR4110	Research Methodology	3	0	2	15	25	60	25	25	150	4
AR4111	Innovation and Design thinking for Robotics and Automation	3	0	0	15	25	60	-	-	100	3
AR4112	Product Life Cycle Management	3	0	0	15	25	60	-	-	100	3
AR4108	Project Stage-II	0	0	16	-	-	-	150	100	250	8
<b>Total of Semester-VIII</b>		<b>9</b>	<b>0</b>	<b>18</b>	<b>45</b>	<b>75</b>	<b>180</b>	<b>175</b>	<b>125</b>	<b>600</b>	<b>18</b>

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**Academic Year – 2024-2025 Semester – VIII**  
**TRACK - D - Entrepreneurship**

Course Code	Course	Teaching Scheme			Semester Examination Scheme of Marks						Credits
		TH	TU	LAB	Theory			TW	LAB	TOTAL	TOTAL
					ISE (15)	MSE (25)	ESE (60)				
AR4113	Economics and Finance Management	3	0	0	15	25	60	-	-	100	3
AR4114	Industrial Management & Operations Research	3	0	0	15	25	60	-	-	100	3
AR4115	Entrepreneurship Development for Robotics and Automation	3	0	2	15	25	60	25	25	150	4
AR4108	Project Stage-II	0	0	16	-	-	-	150	100	250	8
<b>Total of Semester-VIII</b>		<b>9</b>	<b>0</b>	<b>18</b>	<b>45</b>	<b>75</b>	<b>180</b>	<b>175</b>	<b>125</b>	<b>600</b>	<b>18</b>

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