

# BVM Engineering College (An Autonomous Institution)

## Mechanical Engineering Department

### Programme Structure for

### Honours in Robotics

Can be Opted by: Students of B.Tech. (Mechanical Engineering) as per [AR for Minors / Honours](#)

A student has to earn credits from his/her B. Tech. (Mechanical Engineering) to earn honors degree with specialization in Robotics in the following courses of B. Tech. (Mechanical Engineering)

- Kinematics of Machines (For student admitted in AY:2024-25 and onwards)/  
2ME06: Kinematics of Machines (For student admitted before AY: 2024-25)
- Dynamics of Machines (For student admitted in AY:2024-25 and onwards)/3ME01: Dynamics of Machines (For student admitted before AY: 2024-25)
- Control Theory and Applications (For student admitted in AY:2024-25 and onwards)/3ME05: Control Engineering (For student admitted before AY: 2024-25)
- Mechatronics Systems (For student admitted in AY:2024-25 and onwards)/  
4ME45: Industrial Robotics (For student admitted before AY: 2024-25)
- Industrial Robotics (For student admitted in AY:2024-25 and onwards)/  
4ME60: Mechatronics Systems (For student admitted before AY: 2024-25)

Sr. No.	Course Code	Name of Course	L	T	P	H	C
1		Program Elective - I	3	0	2	5	4
2		Program Elective - II	3	0	2	5	4
3		Program Elective - III	3	0	2	5	4
4		Program Elective - IV	3	0	2	5	4
5	<a href="#">HRB91</a>	<a href="#">Robotics Project</a>	0	0	8	8	4
<b>Total</b>			<b>12</b>	<b>0</b>	<b>16</b>	<b>28</b>	<b>20</b>

### Program Elective – I, II, III & IV

1	<a href="#">HSR01</a>	<a href="#">Industrial Automation for Industry 4.0</a>	3	0	2	5	4
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L=Lecture Hrs./wk; T=Tutorial Hrs./wk; P=Practical Hrs./wk; H=Total Contact Hrs./wk; C=Credits of Course

2	<a href="#"><u>HSR02</u></a>	<a href="#"><u>AI for Robotics and Automation</u></a>	3	0	2	5	4
3	<a href="#"><u>HSR03</u></a>	<a href="#"><u>Advance Programming Technique</u></a>	3	0	2	5	4
4	<a href="#"><u>HSR04</u></a>	<a href="#"><u>Smart Sensors and Actuators</u></a>	3	0	2	5	4
5	<a href="#"><u>HRB13</u></a>	<a href="#"><u>Robot Operating System</u></a>	3	0	2	5	4
6	<a href="#"><u>HRB16</u></a>	<a href="#"><u>Aerial and Space Robotics</u></a>	3	0	2	5	4
7	<a href="#"><u>HRB17</u></a>	<a href="#"><u>Assistive Robotics</u></a>	3	0	2	5	4
8	<a href="#"><u>HRB18</u></a>	<a href="#"><u>Intelligent Control Systems</u></a>	3	0	2	5	4
9	<a href="#"><u>HRB19</u></a>	<a href="#"><u>Collaborative and Swarm Robotics</u></a>	3	0	2	5	4
10	<a href="#"><u>HRB20</u></a>	<a href="#"><u>Underwater Robotics</u></a>	3	0	2	5	4
11	<a href="#"><u>HRB21</u></a>	<a href="#"><u>Mobile and Legged Robotics</u></a>	3	0	2	5	4

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