

# **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)

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

<b>Sr. No.</b>	<b>Course Code</b>	<b>Name of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>H</b>	<b>C</b>
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="#"><u>HRB91</u></a>	<a href="#"><u>Robotics Project</u></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="#"><u>HSR01</u></a>	<a href="#"><u>Industrial Automation for Industry 4.0</u></a>	3	0	2	5	4
---	------------------------------	---	---	---	---	---	---

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

---