

A Report on “ Hands-on Robotics workshop “

Organized by

Department of Computer Science and CDC in collaboration with TechFest IITB

The Department of Computer Science and Career Development Cell (Samarth Bharat), under the Innovation and Incubation Cell (Udhmodya Foundation) of Mata Sundri College for Women in collaboration with the prestigious IIT Bombay Techfest, successfully organized an engaging Robotics Workshop on 22nd September 2025 from 12.30PM to 4.30PM in Mata Gujri Hall. The workshop witnessed the enthusiastic participation of 80+ students, each equipped with their laptops, eager to dive into the fascinating world of robotics and coding.

The session was conducted by Mr. Harsh Parashar, an expert in the field of robotics and automation. He guided the students through various concepts essential to understanding and building robots. The workshop covered:

Motor Driver Mechanism – its structure, functioning, and practical usage in robotics.
Line Follower Robot – design, logic, and implementation.
LSBR Algorithm – step-by-step explanation of its role in autonomous systems.
C Library Functions – their application in coding and simplifying robotic programming.

In addition to these technical aspects, Mr. Parashar emphasized common mistakes to avoid while handling robotic tools and coding. He also provided valuable insights into:

- Basics of Coding – building a strong programming foundation.
- Mathematics as the Base of AI – how logic and mathematical models power robotics and artificial intelligence.
- Future Prospects in Robotics – emerging career opportunities and the scope of innovation in this field.
- Machine Parts Demonstration – showcasing real components to connect theory with practice.



The hands-on coding practice allowed students to immediately apply their learnings, making the workshop highly interactive and impactful. Participants actively engaged with the mentor, solving queries and experimenting with their code.

The success of this event was made possible under the mentorship of Dr. Harshmeeta Kaur Soni (Convener) and Dr. Ashema Hasti (Co-Convener, MSIIC and TIC, Department of Computer Science), with the dedicated efforts of the organising team members of the MSIIC Society and Department of Computer Science. A special mention goes to Lipika Yadav (President) and Divleen Kaur (Vice-President), Coordinators of Department of Computer Science Deeksha Garg, Sikha Yadav and Nitya Kapoor for their seamless management and coordination.



The workshop concluded with an inspiring note on the future of robotics, motivating students to continue exploring and innovating in this rapidly advancing domain. The event proved to be a great success, providing participants with both practical knowledge and future-oriented guidance.