



# Maharaja Agrasen Institute of Technology, Delhi

## Department of Mechanical Engineering

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### EVENT PARTICIPATION & ACHIEVEMENT REPORT

**Academic Year:** 2025-2026 | **Semester:** Even

**Club/Society:** Team Aerostars (UAV R&D Society of MAIT)

**Report Type:** Co-curricular / Extracurricular Achievement

#### 1. Event Profile

- **Title of the Event:** Techkriti'26 (Technical Fest, IIT Kanpur)
- **Level of Event:** National
- **Date of Event:** 19-22<sup>nd</sup> March 2026
- **Venue:** IIT Kanpur
- **Total Participating Teams:** 100+ team from all over India
- **Participating Team from MAIT:** Team Aerostars (UAV R&D Society of MAIT)
- **Faculty Coordinator:** Dr. Kanchan Mudgil

#### 2. Objectives of Participation

- **PO1 – Engineering Knowledge:** Apply principles of electronics, control systems, and programming in robot design.
- **PO2 – Problem Analysis:** Identify and troubleshoot issues such as sensor inaccuracies and control errors.
- **PO3 – Design/Development of Solutions:** Design and optimize a line-following robot for efficient performance.
- **PO4 – Investigation of Complex Problems:** Perform testing, analyze failures, and refine system performance.
- **PO5 – Modern Tool Usage:** Utilize microcontrollers, sensors, and programming tools effectively.
- **PO9 – Individual and Team Work:** Collaborate efficiently within the team to achieve common goals.
- **PO10 – Communication:** Share ideas, strategies, and technical insights within the team.
- **PO12 – Life-long Learning:** Learn from iterative failures and continuously improve technical skills.

### 3. Description of the event

Students from Maharaja Agrasen Institute of Technology (MAIT), as part of **Team Aerostars**, actively participated in multiple prestigious competitions at *Techkriti'26*, organized by Indian Institute of Technology Kanpur, held from 19th to 22nd March 2026. The team competed in three major events, demonstrating technical excellence, innovation, and strong teamwork.

In the **International Automatic Robotics Challenge (IARC) – Line Following Robot Contest**, the team secured an impressive **3rd position** among approximately 50 participating teams, winning a cash prize of ₹12,500. The competition required the design and development of an autonomous robot capable of precise navigation. Despite initial challenges, the team successfully optimized their system through continuous testing and refinement, resulting in a smooth and efficient performance.

In the **Boeing Aero Modelling Competition (Fixed Wing)**, Team Aerostars qualified for the **semi-finals** and earned a cash prize of ₹5,000. This fixed-wing aircraft competition focused on designing efficient and stable aircraft systems, lift generation, testing both aerodynamic understanding and practical implementation.

Additionally, the team qualified as **finalists in the Hovercraft Competition**, demonstrating their versatility and capability in handling diverse engineering challenges.





## 4. Learning Outcomes

Upon the successful completion of this event, the participating students were able to:

- **Skills Gained:** Improved hands-on skills in UAV design, circuit integration, programming, debugging, and system testing during competitions at Indian Institute of Technology Kanpur.
- **Knowledge Enhancement:** Strengthened understanding of core engineering concepts such as control systems, aerodynamics, sensors, and real-time system behavior.
- **Awareness Created:** Gained awareness of real-world engineering challenges, industry-level competition standards, and the importance of precision and reliability in design.
- **Innovation Mindset Development:** Encouraged creative thinking and innovative approaches to solve problems, optimize designs, and improve system performance under constraints.
- **Course Gap Fulfillment:** Bridged the gap between theoretical classroom learning and practical implementation through hands-on exposure to UAV projects at MAIT.

## 6. Acknowledgements & Support

The outstanding success of Team Aerostars is a direct result of the continuous guidance, infrastructural support and encouragement provided by the MAIT administration, Director, Deans, HODs, and the Faculty.

## 7. List of Students

### CSE Department

S. No.	Name	Enrollment No.	Year
1	Ayushya Ranjan	23814802724	2nd
2	Saarthak Kamra	03214813124	2nd

### CST Department

S. No.	Name	Enrollment No.	Year
1	Saksham Kashyap	03214812724	2nd

### **ECE Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Year</b>
<b>1</b>	<b>Melvin Joseph</b>	<b>03414802824</b>	<b>2nd</b>
<b>2</b>	<b>Sneha Desai</b>	<b>01914802824</b>	<b>2nd</b>
<b>3</b>	<b>Kamran Ahmad</b>	<b>04214815924</b>	<b>2nd</b>
<b>4</b>	<b>Vandana Kumari</b>	<b>03714804924</b>	<b>2nd</b>
<b>5</b>	<b>Saurabh Chhikara</b>	<b>35314811124</b>	<b>2nd</b>

### **EEE Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Year</b>
<b>1</b>	<b>Shivesh Kashyap</b>	<b>60514804924</b>	<b>3rd</b>

### **ME Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Year</b>
<b>1</b>	<b>Ankit</b>	<b>20314811123</b>	<b>3rd</b>
<b>2</b>	<b>Vani Jain</b>	<b>02414811123</b>	<b>3rd</b>
<b>3</b>	<b>Naman Singh</b>	<b>03214813124</b>	<b>2nd</b>

### **MAE Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Year</b>
<b>1</b>	<b>Shresth Bajaj</b>	<b>00314803623</b>	<b>3rd</b>

### **ITE Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Year</b>
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<b>1</b>	<b>Satyam Raj</b>	<b>05314813124</b>	<b>2nd</b>
<b>2</b>	<b>Pankaj Kumar</b>	<b>08514813124</b>	<b>2nd</b>
<b>3</b>	<b>Jatin Bisht</b>	<b>06214813124</b>	<b>2nd</b>

**APPLIED SCIENCES Department**

<b>S. No.</b>	<b>Name</b>	<b>Enrollment No.</b>	<b>Branch</b>
<b>1</b>	<b>Arpita Bisht</b>	<b>05014815625</b>	<b>CSE-AIML</b>
<b>2</b>	<b>Prachi Gupta</b>	<b>03214811125</b>	<b>ME</b>
<b>3</b>	<b>Nikhil Patel</b>	<b>02214811125</b>	<b>ME</b>
<b>4</b>	<b>Bidya Bhushan Nanda</b>	<b>03414816025</b>	<b>ECE-VLSI</b>
<b>5</b>	<b>Hardik Kandpal</b>	<b>03714802725</b>	<b>CSE</b>
<b>6</b>	<b>Parth Gupta</b>	<b>03214802825</b>	<b>ECE</b>
<b>7</b>	<b>Sukhambir Singh</b>	<b>05314803125</b>	<b>IT</b>
<b>8</b>	<b>Manya Saluja</b>	<b>00914815725</b>	<b>CSE-DS</b>
<b>9</b>	<b>Aditya Kashyap</b>	<b>01214815925</b>	<b>ECE-ACT</b>
<b>10</b>	<b>Divansh Kundra</b>	<b>04914815925</b>	<b>ECE-ACT</b>
<b>11</b>	<b>Aagam Jain</b>	<b>12314803125</b>	<b>IT</b>
<b>12</b>	<b>Karan Bindal</b>	<b>02914811125</b>	<b>ME</b>
<b>13</b>	<b>Vaibhav Kumar</b>	<b>02714816025</b>	<b>ECE-VLSI</b>
<b>14</b>	<b>Pranay Shukla</b>	<b>04514815925</b>	<b>ECE-ACT</b>
<b>15</b>	<b>Samarth Chaudhary</b>	<b>16914803125</b>	<b>IT</b>
<b>16</b>	<b>Jagratt Varshney</b>	<b>18714803125</b>	<b>IT</b>
<b>17</b>	<b>Bhavya Garg</b>	<b>02096402725</b>	<b>CSE-II</b>
<b>18</b>	<b>Navya Gupta</b>	<b>28414803125</b>	<b>IT</b>

<b>19</b>	<b>Aarav Vasudev</b>	<b>05814811125</b>	<b>ME</b>
<b>20</b>	<b>Manit Nagpal</b>	<b>13314802725</b>	<b>CSE</b>

## **8. Enclosures**

1. *Copy of Student Certificates*

### **Prepared & Submitted By:**

**Name:** Dr Kanchan Mudgil  
**Designation:** Assistant Professor

**Verified By:** Dr. Vaibhav Jain  
HoD (ME)

**Approved By: Prof. (Dr.) VIKRAM BALI**  
Director