Maharaja Agrasen Institute of Technology, Delhi
Department of Mechanical Engineering

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:** 19-22nd 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

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

EEE Department

S. No.	Name	Enrollment No.	Year
1	Shivesh Kashyap	60514804924	3rd

ME Department

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

MAE Department

S. No.	Name	Enrollment No.	Year
1	Shresth Bajaj	00314803623	3rd

ITE Department

S. No.	Name	Enrollment No.	Year

1	Satyam Raj	05314813124	2nd
2	Pankaj Kumar	08514813124	2nd
3	Jatin Bisht	06214813124	2nd

APPLIED SCIENCES Department

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

19	Aarav Vasudev	05814811125	ME
20	Manit Nagpal	13314802725	CSE

Prepared & Submitted By:

Name: Dr. Kanchan Mudgil
Designation: Assistant Professor

Verified By: Dr. Vaibhav Jain
HoD (ME)

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