

Aeromodelling Competition Guidelines

Objective:

The competition challenges participants to design, build, and operate a remote-controlled (RC) aircraft that demonstrates exceptional design, flight performance, and maneuverability.

General Norms:

- **Team Composition:** Each team can have 2-4 members (UG, PG, Diploma; No Professional Pilots Allowed).
- Aircraft Type: Only fixed-wing RC aircraft are allowed. No quadcopters,
 VTOL designs, or pre-assembled kits are permitted.
- **Flight Control:** Aircraft must be manually operated using a remote control. Autonomous or semi-autonomous planes are not allowed.
- Minimum Distance Rule: A minimum 5m distance from the ground should be maintained throughout the flight (except the obstacles).

Aircraft Design Constraints:

• Weight: Maximum take-off weight 1.5kg.

• Wingspan: Maximum 1m.

Competition Format:

The competition will be conducted in a **single round**. The details are as follows:

Design Check:

- The aircraft's design will be checked by judges and the event managing team to ensure adherence to design criteria and constraints, including materials used, weight of plane, wingspan, innovation in design, and other aerodynamic features.
- Scoring: Design evaluation will be done on a scale of 10 points.



Flight Performance Challenges:

- Takeoff: Smooth takeoff will be evaluated on a scale of 10 points.
- Obstacle Navigation:
 - The course will include two obstacles, details of which will be revealed on the day of the competition.
 - Obstacle 1: Evaluated on a scale of 30 points.
 - Obstacle 2: Evaluated on a scale of 30 points.
 - o A **trial round** will be given before the competition starts.
- Landing Precision: Land the aircraft in a designated target zone with minimal deviation.
 - Scoring: Awarded on a scale of 20 points, based on precise landing within target zones.

Additional Rules:

- Battery Replacement: Not allowed once the competition round begins.
- Disqualification Criteria:
 - Failure to follow design constraints.
 - Loss of control resulting in danger.
 - Exceeding the weight or size constraints.
 - Use of pre-assembled kits
 - Create a video of their plane under construction and send it to (email:bt23ece030@nituk.ac.in), cc- techclub@nituk.ac.in by 26 February, 2025.

Additional Notes:

- Teams are encouraged to experiment with wing shapes, aspect ratios, and balancing techniques to optimize performance.
- All decisions made by the judging panel are **final and binding**.

Important Notice:



- The organizers reserve the right to modify the rules or guidelines at any time. Any such changes will be communicated to the participants promptly.
- **Judging decisions are final**, and no appeals or queries regarding the judgment will be entertained.
- The **prize pool** is subject to the **number of participants** and at the discretion of the organizing committee.
- Teams are responsible for ensuring their submission complies with the guidelines.
- Cliffesto'25 reserves the right to disqualify any team at any stage for non-compliance with the rules or misconduct.

Contact Details:

For any queries or clarifications, participants are encouraged to contact the **Cliffesto'25 organizing team**.

Event Head:

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