



# **Drone Zone**

The future is now.

#### INTRODUCTION

This event tests the ability of participants to make a DIY Drone (QuadCopter) and make it stable as well as some autonomous tasks. In this event, participants will require to go through the basics of a drone and need to understand the dynamics as well as apply them in real-life scenarios.

#### PRIZE MONEY

1st Prize: Rs. 45000 2nd Prize: Rs. 30000

### PROBLEM STATEMENT

There will be a total of 3 Rounds in this event. One will be online and two will be offline. Participants need to select appropriate components, make a comprehensive report and fabricate the drone with the same for further rounds.

#### **ROUND 1**

- Mode: Online
- Submission of the following documents about the Drone:
  - Comprehensive report explaining all the components selected for Drone within the specified constraints in event.
  - A video of the working model.
- The above will be collected through a google form which will be sent to the registered e-mail id.

#### **ROUND 2**

- Mode: Offline
- The course will not be disclosed prior to the round.
- The vehicles will be judged in the following events:
  - Lap Time.
  - Payload carried.

#### **ROUND 3**

- Mode: Offline.
- Payload delivery.













- The problem statement will be discussed after the completion of Round 2 and shortlisted teams will be allowed to participate in this Round.
- The vehicles will be judged in the following events:
  - · Lap Time.
  - Payload carried.

# **GENERAL RULES:**

- If less than 5 teams register, then only the first prize will be given, and if 5 to 15 teams register, only two prizes will be given. All three prizes will be given only if more than 15 team registers.
- No readymade drones are allowed.
- No composite material frame or propeller is allowed.
- The diagonal size of the Drone should be between 350mm to 450mm.
- The Thrust to Weight Ratio should not exist beyond 2.5.
- There should be some attachments.
- Every team should pass the technical inspection before entering Round 2.
- For Round 2, Drone will have to time 1 lap on the fixed arena.
- Two trials will be given in Round 2 and one trial will be given in Round 3.
- Once the drone has taken off it should not touch the ground until it reaches the endpoint.
- Minimum 3 minutes of flight time will be required otherwise the team will be disqualified.
- Any misbehavior will lead you to disqualification from the event.
- Decision Taken by Judges will be final and binding for all
- All decisions taken by the organizing team will be deemed final, and no more changes will be encouraged.
- Bring your college/student I-Card at the time of the event.

# **TEAM SPECIFICATIONS:**

- You can participate individually or with a team of a maximum of 6 members.
- Any number of candidates can participate from one college/school.
- Participants are required to bring their school/college ID cards.
- Once registered, the same candidate cannot register with another name for the event.
- Organizers have the right to reject entries for any inappropriate username of the candidate.
- Organizers must be notified if a candidate's username has been changed.











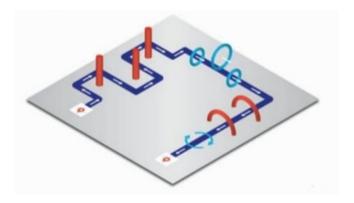


# **JUDGING CRITERIA**

- Points will be awarded based on the dynamic performance of the Drone in Round 2. Points awarded in the events will be summed up.
- Point system:
  - Percentile of maximum payload weight.
  - Percentile of minimum lap time.

# TRACK DETAILS

• A similar type of track will be given in Round 2.



# **REGISTRATION DETAILS**

- Fees Rs. 50
- Register at: https://mindbendsvnit.in/









