

Air Vélo



Introduction:

3D modeling and simulations help us to visualize the feasibility of a mechanism in real life applications. Our task for this event is to design and simulate a bike and its individual components as compactly as possible which can be used for practical applications while also taking care of the costs required to be able to manufacture this product commercially. This competition is open to all the design and modeling enthusiasts who are interested in machine designing.

Rules:

- Participation in teams of 3-5 members.
- The modification made shouldn't be too far-fetched economically, given the model is actually manufactured.
- The vehicle need not be of the same design as shown in the poster. It is
 just for representation.
- There is no restriction on the software to be used, however 'Solidworks' is recommended.
- The competition is open to all students with a knack for modeling things in a computer-aided design (CAD) and simulation software of their choice.
- The organizer's decision will be final in case of any discrepancy.

NOTE: There is no entry fee to enter the competition. Also, no purchases are required for the completion of this competition.





Judging Criteria:

A total of 150 points for the competition will be divided into multiple parts.

- 3D model 60 points.
 - **Breakout:**
 - The complexity and compact design of the model 25 points
 - Creativity and Innovative Ideas 35 points
- Simulations 60 points.
- Report 30 points.

Plagiarism:

In case of plagiarism, there will be a penalty.

- Below 5% plag: -5 points
- 5 10% plag: -10 points
- 10 20% plag: -20 points
- Above 20%: disqualified

Submission timeline:

Problem Statement Release: 10th May, 12 noon.

Submission deadline: 15th May, EOD.

Participants may reach out to us over email in case of any queries at: b20328@students.iitmandi.ac.in

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