

MECH REEL CHALLENGE

1. Introduction

The Mech Reel Challenge is a technical cum creative event for synergy prefest. The event focuses on improving student's ability to clearly explain mechanical engineering concepts, failures, processes, and design decisions through short, well structured video reels. The event is designed to be low cost, scalable, and highly engaging, making it suitable for large participation across the college.

2. Event Overview

Participants create a short video reel explaining a mechanical engineering topic which they got from the curated list. The students will be given a google form to submit the reel and the deadline will be specified later , students would be asked to ideate, shoot and edit the reel from their choice of place . The emphasis would be on technical correctness and creative presentation rather than entertainment alone.

3. Team Details

- Team Size: 1–4 students per team depending on participation
- Eligibility: Open to all undergraduate mechanical students
- Mode: online submission, date to be specified

6. Topics

Participants will choose one topic from the list provided by the team. Topic categories include:

- Failure Analysis (fatigue, buckling, bearing failure)
- Core Mechanical Concepts (gears, pumps, CVT, heat exchangers)
- Manufacturing Processes (casting, forging, welding, machining)
- Design Decisions (material selection, geometry optimization)
- Everyday Mechanical Engineering Applications

7. Rules & Guidelines

- Reel duration: 45–90 seconds
- Use of real objects, sketches, or demonstrations would be appreciated
- Plagiarism will result in disqualification
- Judges' decision will be final

8. Judging Criteria (100 Marks)

- Technical Accuracy – 35 marks
- Clarity of Explanation – 25 marks
- Creativity & Visualization including originality – 20 marks

- Engineering Insight – 10 marks
- Overall Impact – 10 marks

Note: Social media likes or views will not be considered for evaluation , and the winner reel will be posted in the synergy official Instagram page.

10. Prize money

* 1st price: 2500

*2nd price: 1500

*3rd price: 1000

11. Expected Outcomes

The event is expected to enhance students' confidence in explaining technical concepts, improve peer-to-peer learning, and create a repository of high-quality student-generated engineering content. It also strengthens the symposium's technical identity while remaining cost-effective and easy to manage.

12. Conclusion

The Mech Reel Challenge is a industry relevant event that combines creativity with core mechanical engineering fundamentals. It is scalable for large participation, feasible within a limited budget, and aligns well with academic and professional skill development objectives.