

ORION

UAV DESIGN CHALLENGE

Organized by **P.E.G.A.S.U.S.** in collaboration with **S.K.E.T.C.H.** & **CCGP IIIT**

Mission

Orion is a premier 2-day hackathon challenging engineering minds to conceptualize, design, and simulate Unmanned Aerial Vehicles (UAVs) for real-world applications. Bridging aerodynamics, avionics, and software to transform bold ideas into competition-ready prototypes.

Choose Your Arena

Senior Track: Advanced integration problems (e.g., autonomous delivery, disaster response)

First-Year Special Track: Tailored challenges designed for 1st year undergraduate students to build foundational skills and ensure fair competition.

What's at Stake?

Cash Prizes: Rewarded to the top-performing crews.

Direct Internship Opportunities: The winning teams' portfolios will be exclusively shared with leading UAV and tech companies partnering with Club P.E.G.A.S.U.S.

Registration Fee

200 INR per crew

CREW Eligibility

Crew Size: Exactly 4 members per team (no multiple team participation). Valid college ID required. (UG, PG and PhD team also permitted)

The Golden Rule: Every crew **MUST** have at least one member with basic CAD modeling skills.

The Interdisciplinary Bonus: Teams combining different engineering branches receive bonus marks in the final evaluation.

Ideal crew: Aerospace (CAD/Aero), Avionics (Sensors/Hardware), EP (Physics/Simulation), and CS (Software/Algorithms).

48-Hour Timeline

Day 1 (Oct 10, 2026):

Morning: Problem release & Exclusive 3D Modeling Workshop for beginners and CAD leads.

Afternoon/Evening: Ideation, Crew Planning, and Development Phase I (Core CAD & avionics mapping).

Day 2 (Oct 11, 2026):

Morning: Development Phase II (Finalizing models, software, and docs).

Afternoon: Mentor Review (14:00 - 16:00).

Finale: Final Presentations begin at 16:00, followed by the Closing Ceremony.

Rules of Engagement

- **Commencement:** Project development must strictly begin only after the official kickoff.
- **Originality:** Plagiarism will result in immediate disqualification; any pre-built modules must be explicitly declared upfront.
- **Conduct:** Professional discipline is mandatory. Damaging institute property will invite severe penalties or disqualification.
- **Deliverables:** All CAD files, presentations, and documents must be submitted prior to the final deadline.
- **Authority:** Judges' decisions are final and binding. Organizers reserve the right to amend rules or schedules as necessary.

How You Win (Judging Criteria)

- Innovation & Creativity (25%)
- Technical Complexity & Feasibility (20%)
- Problem Relevance (15%)
- Scalability (15%)
- Presentation & Pitching (15%)
- CAD Detailing (10%)

Queries

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