



योग : कर्मणु कोशलम्

AEROKRAFT
AEROMODELLING CLUB OF
JORHAT ENGINEERING COLLEGE

ORIENTATION SESSION

2025-26

যোৰহাট অভিযান্ত্ৰিক মহাবিদ্যালয়
JORHAT ENGINEERING COLLEGE
ESTD. - 1960

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ABOUT AEROKRAFT

AeroKraft is the aeromodelling club of Jorhat Engineering College (JEC), Assam. Founded in 2024 by Kaushik Bora along with co-founders Hrisikesh Dutta Choudhury and Abhinandan Deogharia. The Aeromodelling Club of JEC provides a forum for inventors and aviation enthusiasts to delve into the exciting realm of aircraft design, manufacture, and flight. The club was founded with the goal of encouraging students' creativity and technical proficiency. It offers practical experience in the construction of model airplanes, drones, and other aerial vehicles. Members learn important information about engineering principles, control systems, and aerodynamics through workshops, contests, and group projects. In the end, the club prepares students for interesting professions in aerospace and related disciplines by encouraging learning by doing, cooperation, creativity, and passion for aeromodelling. 'It is possible to fly without motors, but not without knowledge and skill'. Leonardo da Vinci once said that "Once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been, and there you will always long to return



PAST ACTIVITIES



AEROMODELLING AND DRONE WORKSHOP 2024

The first and one of the most successful events of Pheonic 2024 was a workshop that drew students from various colleges. Approximately 25 groups participated, making it a vibrant and engaging session

AEROMODELLING AND DRONE WORKSHOP 2025

Technovus 2025. The workshop also featured exciting segments on aeromodelling and drone technology, sparking curiosity and hands-on exploration.



Bottle Rocket Challenge 2025

A fun and engaging activity that introduced students to the fundamentals of propulsion and flight using simple bottle rockets.

RC Craft Competition 2025

A competitive event where students showcased their skills by flying and maneuvering remote-controlled aircraft.



Collaboration with JIST Robotics Club

A session on aeromodelling was conducted by Aerokraft on Jorhat Institute of Science and Technology in collaboration with JIST Robotics Club

Session on JB College, Jorhat

A session on aeromodelling was conducted by Aerokraft recently on JB College, Jorhat





ROADMAP 2025-26

ORIENTATION



DRONE WORKSHOP



**AEROMODELLING
WORKSHOP**



**RC CRAFT
COMPETITION**



**BOTTLE ROCKET
CHALLENGE**



**DRONE
COMPETITION**



Team Introduction

FACULTY ADVISOR



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Bishal Kalita
5th sem

Mechanical Department



Deep Gautam
5th sem

Electrical Department

CLUB HEADS

Mughaka Sema
TECHNICAL HEAD



Srijan Kausik Baruah
DRONE EXPERT

Event Management



Debangshu Borah



Arindom Dutta



Riya Saikia



Smriti Priya Dhan



Nayana Dutta



Chitrakshi Kashyap



Lalrintluanga

Graphics And Design



Siddharth Dutta



Suman Kalita



Bikramjeet Kashyap



Kuldeep Patgiri



Sneha Hazarika

Social Media



Debanga Raj Saikia



Anupam Saikia



Harsita Saikia

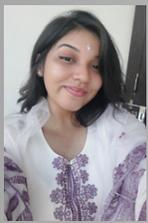


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Orientation Session Overview



CLUB HEAD

Explaining clubs background, past activities, future planning

The Aerokraft Orientation Session 2025–26 was successfully conducted on 1st November 2025 at the Mechanical Seminar Hall of JEC.

The session began with a warm welcome and introduction to the Aerokraft Aeromodelling Club, followed by a presentation on the club's background, past activities, and upcoming plans for the new session.

The program then proceeded with the introduction of the faculty advisor and core team members, after which the technical sessions were conducted by respective co-heads.

The Aeromodelling Team explained the fundamentals of aerodynamics, control surfaces, and aircraft design.

The Drone Team presented the working principles, components, and real-life applications of drones.

The event concluded with an inspiring speech from the club founder, highlighting the vision and goals for the future, followed by a live flying demonstration at the main field, which received enthusiastic participation from attendees.

Aeromodelling Session Overview

The Aeromodelling segment of the orientation was conducted by the Co-Head (Aeromodelling), focusing on the fundamental concepts and principles behind aircraft design and flight.

Participants were introduced to the basics of aerodynamics, including lift, drag, thrust, and weight, and how these forces act on an aircraft during flight.



The session also covered the structure and control surfaces of model aircraft – such as the ailerons, rudder, and elevator – explaining their roles in stability and maneuvering.

Students were briefed about the different types of model aircraft, materials used, and construction techniques adopted in Aerokraft's past projects.

The aim of this session was to provide attendees with a conceptual foundation of aeromodelling and inspire them to participate in the upcoming workshops and hands-on sessions planned for this academic year.

Drone Session Overview

The Drone Session was conducted by the Drone Expert Team of Aerokraft, focusing on the fundamentals, applications, and working principles of unmanned aerial vehicles (UAVs). The speakers explained the basic components of a drone, including the frame, motors, propellers, electronic speed controllers (ESCs), flight controller, and battery system.

The session highlighted the aerodynamic principles governing drone stability and control, along with demonstrations on how sensor data and flight algorithms enable smooth maneuvering. Various types of drones—such as quadcopters, hexacopters, and fixed-wing drones—were discussed, emphasizing their applications in agriculture, surveying, delivery systems, aerial photography, and defense.

The session aimed to give participants a technical understanding and practical insight into drone technology, encouraging them to explore drone design, assembly, and piloting through upcoming Aerokraft workshops.



Founder's Address

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The Founder's Address was delivered by Kaushik Bora, 7th sem Electrical Department, who shared the journey and inspiration behind the establishment of the Aerokraft Aeromodelling Club. He highlighted the club's mission to promote hands-on learning in aerodynamics, drone technology, and model aircraft design among students.

The founder reflected on past achievements, the growth of the club, and emphasized the importance of teamwork, innovation, and consistent learning. He also outlined the future vision of Aerokraft — to expand its activities, organize more inter-college events, and provide a platform for students to develop technical and creative skills in the field of aeromodelling and drone systems.

The address concluded with an encouraging message, motivating all members and new entrants to actively participate, explore new ideas, and contribute towards making Aerokraft a leading student-driven innovation club.

Students Participation & Interest overview



- The orientation session witnessed an enthusiastic response from students across various departments.
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- Around 75 students attended the session in the Mechanical Seminar Hall.
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- Many showed active interest in joining Aerokraft and taking part in the upcoming Aeromodelling and Drone workshops.
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- Interactive Q&A segments reflected strong curiosity about aircraft design, drone applications, and flight technology.



Flying Demonstration

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The Flying Demonstration marked the concluding segment of the Aerokraft Orientation Session 2025–26. It was held at the main field of JEC, where the Aerokraft team conducted live flight demonstrations of model aircraft and drones built by club members.



CONCLUSION

The Aerokraft Orientation Session 2025–26 concluded successfully, fulfilling its objective of introducing students to the world of aeromodelling and drone technology.

The event provided a comprehensive insight into the activities, future plans, and learning opportunities offered by the club.

The Aerokraft team extends sincere gratitude to the Faculty Advisor, Dr. Diganta Hatibaruah, and the Mechanical Engineering Department for their constant support and guidance.

With renewed enthusiasm, Aerokraft looks forward to organizing more hands-on workshops, competitions, and projects in the coming months.