**DEPARTMENT: Computer Science Engineering (CSE)**

**TITLE: “DRONE HACK”**

**Date:** 28th June 2024 – 30th June 2024

**Time: 09:00 AM – 04:00PM**

**Venue: A Block-306**

**No. of Participants: 70**

**Objective:** Our mission is simple yet ambitious: to bridge the gap between theoretical knowledge and practical application in the field of Drone. We aim to empower the next generation of innovators, engineers, and problem-solvers with hands-on experience and industry-relevant skills that are essential in today's digital landscape

**Event Description:**

‘Drone Hack’ is an event comprising of one Day book camp and 36 hours Hackathon at Department of Computer Science and Engineering, Anurag University, which will prepare, guide and support building innovative projects. The proposed boot camp will assist aspiring technology in transforming their enthusiasm and ideas into projects. Participants will develop and launch innovative projects in their academic education.

**Boot Camp Session:**

**Day 1 Summary:**

Day 1 features an introduction to Drone, which begins with creating and communicating a Vision/Mission that the aspirant cares about. This exercise builds on the Confidence portion. It enables the participant to recognize opportunity, clearly converge on their ideas and align them to their vision & mission.

**Day 2 Summary:**

At the event, participants focused on identifying various problem statements related to drone applications. They gathered hardware and software requirements tailored to address these problems, choosing appropriate sensors, cameras, and software tools. The team then proceeded to assemble the drones, ensuring all components were correctly integrated and functional. Following this, they calibrated the accelerometers to ensure accurate flight control and stability. By the end of the event, the participants had developed functional drone prototypes ready for testing against the identified problem statements.

**Day 3 Summary:**

At the event, participants identified various drone-related problem statements to tackle. They calibrated the drone's compass to ensure accurate navigation and direction. Next, they performed radio calibration to guarantee reliable communication between the drone and the controller. The team then created a PowerPoint presentation to document their findings, solutions, and project progress. Finally, they demonstrated their completed project, showcasing the drone's capabilities and how it effectively addresses the identified problems.

**In A Nutshell;**

**Day - 1:** The Basics Un-Manned Aerial Vehicles – 3.00 hr

**Day - 2:** Session 1- Hand on Session to assemble UAV – 3.00 hr

Session 2- Drone Calibration

Mentoring the students for their project building.

**Day - 3:** Demonstration of project

Mentoring the students and give suggestion for their project.

**Outcomes:**

1. The participants understood the basic of Drone .

2. They converged on an idea that they want to take forward.

3. They came up with a first version of their proposed project. This has been assessed and the mentors suggested changes.

4. They learned to make prototype building.

5. Those interested in taking it forward can be given further mentoring.

**Conclusion:**

As a result of the 36-hour event, participants gained in-depth knowledge and practical skills in drone technology. They successfully assembled and calibrated drones, identified and addressed key problem statements, and demonstrated innovative solutions. The final project presentations showcased their ability to integrate hardware and software effectively, ensuring accurate drone navigation and operation. The event not only enhanced their technical expertise but also fostered teamwork and problem-solving skills, preparing them for future challenges in the field of drone applications.





