Department of Electrical and Electronics Engineering
Drone Club

Shaping the Future of UAV Innovation through Student Projects, Research, and Industry Collaboration.

Vision Statement

The Drone Club of the Department of Electrical and Electronics Engineering envisions becoming a center of excellence in **UAV research, design, and applications**. The club focuses on equipping students with advanced technical skills in drone mechanics, programming, and autonomous systems, while fostering innovation through industry collaborations, MoUs, and value-added courses. By integrating academic learning with hands-on projects, hackathons, and real-world problem-solving, the club prepares students for emerging applications in **agriculture, healthcare, surveillance, and smart infrastructure**, thereby aligning with the future needs of the UAV industry and society.

Faculty Coordinators:

- **Dr. Vimala Kumari J,** Assistant Professor, Dept. of EEE

- **Mrs. B. Swarupa Rani**, Assistant Professor, Dept. of EEE

Student Coordinators

- **Club President:** P. Naveen Kumar (228W1A0240)

- **Club Secretary:** P. Rohith (248W5A0219)

- **Club Secretary (Girls):** P. Gayathri (238W1A0297)

Key Achievements and Activities
- **Memorandums of Understanding (MoUs):**
  - Signed with Garuda Aerospace Pvt. Ltd. on 09/08/2024.
  - Signed with Dronehub Technologies Pvt. Ltd. on 23/03/2025.
- **Workshops and Value-Added Courses:**
  - Four-day Value-Added Course on Drone Dynamics and Flying in association with Garuda Aerospace, Chennai (09–12/11/2024).
  - Five-week Value-Added Course on Drone Technology with participation from 50 students across EEE, ECE, and ME.
  - Two-day National-Level Workshop on Aerial Drone Technology with 63 participants mastering advancements in UAV applications.

- **Hackathons and Competitions:**
  - Amaravati Drone Hackathon 2024 (18–19/10/2024) – participation by Dr. Vimala Kumari J and student team.
  - Drone Fusion Hackathon (03–04/04/2025) – 43 teams registered under 9 themes, showcasing innovative UAV solutions.
- **Student Projects and Innovations:**
  - Development of Power Transmission Line Survey Drone.
  - Development of Weather Forecasting Drone.
- **Internships and Placements:**
  - 10 students secured paid internships at Garuda Aerospace, IIT Tirupati, and Softouz Solutions.
  - 3 students placed in drone-related industries, including Garuda Aerospace, Nimishree, and Coromandel Pvt. Ltd.
- **Industry Exposure and Training:**
  - Students attended the Centre of Excellence (COE) Training Program by Garuda Aerospace, Chennai (12–18/05/2025).

Faculty Achievement

Dr. Vimala Kumari J has been awarded a prestigious Post-Doctoral Fellowship at IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF), further strengthening the department's research credentials and contributing to the Drone Club's vision of combining academic excellence with industry-driven innovation.

MoUs:

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

MEMORANDUM OF UNDERSTANDING

9th August 2024

BETWEEN

Garuda aerospace

Garuda Aerospace Private Limited

Chennai

&

VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE

DEEMED TO BE UNIVERSITY

(Under Section 3 of UGC Act, 1956)
(Sponsored by Siddhartha Academy of General & Technical Education), Vijayawada, A.P.

A significant milestone is to establish a Center of Excellence (COE) for enhancing cutting-edge research and training opportunities in Drone Technology.

MEMORANDUM OF UNDERSTANDING

Between

SIDDHARTHA ACEDEMY OF HIGHER EDUCATION
(Deemed to be University)
Vijayawada -520007
&

DroneHub
Build. Train. Fly.

DroneHub Technologies Pvt Ltd
Vijayawada - 521139

March 2025

Department of Electrical & Electronics Engineering
Velagapudi Ramakrishna School of Engineering   SIDDHARTHA
ACADEMY OF HIGHER EDUCATION
Deemed to be University
Sponsored by Siddhartha Academy of General and Technical Education
Vijayawada, Andhra Pradesh-520 007
Phone 0866 2582333.www.vrsiddhartha.ac.in

<u>Photo Gallery:</u>

Figure: 1 Drone Club

Figure: 2 Basic Flight operations

Figure: 3: Real-time flying

Fig. 4 UAVs of various themes in Hackathon

Fig. 5 Student Participation at different venues

Fig. 6. Volunteers explained the rules to the participants

Fig. 7 Payload delivery competition

Fig. 8 Prize Distribution

Fig. 9 Prize Distribution

Fig. 10 Drone Club

PRIZE WON BY THE CLUB IN SRM UNIVERSITY

Research Experience:

1. Mandala Raga Sri Ratna Sai Ramya, **Vimala Kumari J**, Yarajarla Moulika and Venkateswara Rao Bathina, "Unmanned Aerial Vehicles to transport healthcare equipment under Emergency" The International Conference on Intelligent Computing and Emerging Communication Technologies (ICEC-2024) organised by SRM University-AP, India.
2. Ayisha Firdos Mohammad, **Vimala Kumari J**, Sravya Katam and Venkateswara Rao Bathina, "Petal copter used to drop flowers on honoured guests during formal occasions",
IEEE SILCON-2024 organized by NIT, Agartala, India.