HINDUSTHAN INSTITUTE OF TECHNOLOGY
COIMBATORE - 641 032
DEPARTMENT OF AERONAUTICAL ENGINEERING

Center of Excellence in Drone Technology

Objective:

The objective of the Centre is to enlighten and enhance the knowledge and skills of students in the field of Drone Technology by;

- Conducting high quality training to the students in handling, assembling, dismantling and flying of drones.
- Introducing and implementing recent advancements in additive manufacturing like 3-D printing for developing drone components.
- Conducting Research and Development in the drone sector and disseminating the results to the industry and public by filing patents and publications.
- Transforming the results into products, solutions and business proposals.

- Supporting innovative proposals and ideas from students in terms of functions and facilities.
- Creating network of nearby institutes and industries for capacity building and mentor support.
- Developing relations across states, between governments, industrial associations, institutions and experts for establishing collaborations of various research and commercial projects of organizations.
- Establishing a sound new institutional base for executing the drone related projects by strengthening the existing infrastructure.
- Generating revenue through consultancy projects like customized drone development, component manufacturing, surveillance, aerial survey and mapping etc. by strengthening the capabilities of the Centre.
- Establishing an Entrepreneurship cell and thereby supporting the student and faculty startups.
- Conducting various technical events to exhibit the talents of students.

Skill Training:

1. Multirotor design and Development
2. Fixed wing design and Development
3. Agriculture Drone development
4. DGCA Certified Flying Training

Remote Pilot Training organization (RPTO):

A Remote Pilot Training organization (RPTO) is an organization authorized by the Directorate General of Civil Aviation (DGCA) to impart Remote Pilot Training to any individual seeking for a Remote Pilot Certificate under Rule 34 of Drone Rules 2021. Remote Pilot Training organization (RPTO) had been inaugurated with the objective to develop Drone pilots.

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Hon'ble TN Chief Minister Mr. M.K Stalin Inaugurated RPTO through Virtual mode on 08.11.2022

RPTO details in DGCA digital sky portal website:

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https://digitalsky.dgca.gov.in/training-organizations

Facilities Available:

1. 3D Printers (Model: Ender) – for fabrication of Drone propeller, propeller guard and Nano drone frame.
2. Multiple Charger – All type of batteries can be charged.
3. Drone Simulator – For Flying practice

Products Developed:

1. Nano Drone
2. Quadcopter for Women Safety
3. Quadcopter for Object Dropping
4. Agriculture Drone
5. Various specialized drone attachments for different applications.

Industry collaboration:

De Drone World Solutions private Limited, Coimbatore

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Guest Lecture on "Emerging Trends in Drone Technology"

The Department of Aeronautical Engineering in Association with Hindusthan Astronomy Club of Hindusthan Institute of Technology organized a **Guest Lecture on "Emerging Trends in Drone Technology" on 24th June 2025.**

A total of 79 students from the department of Aeronautical Engineering took part in the Guest Lecture. The session started at 10.30 am with the welcome address by Dr. R. Thirumalai, Head of the Aeronautical Engineering Department followed by the Presidential address by Dr. C. Natarajan, Principal, Hindusthan Institute of Technology.

The speaker for the Guest Lecture was:

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Wing Commander A Satish Kumar (Retd), Executive Director, De Drone World Solutions Pvt Ltd

Education

- B.E (Electronics and Communication).
- PGD PM & IR (Post Graduate Diploma in Personnel Management & industrial relations).
- Boeing 737-200 (Avionics) : Trained by Air India & DGCA License Holder.

Experience

- Executive Director, De Drone World Solutions Pvt Ltd
- Director & CEO, Vil Aviation Private Limited.
- Indian Air Force (IAF)-25 Years

Wing Commander A Satish Kumar (Retd), Executive Director, De Drone World Solutions Pvt Ltd was invited as a chief guest and delivers Guest Lecture on "Drone Innovations in Technological Applications". He talks about Drones, Unmanned Aerial Vehicles (UAVs) with remote or autonomous control systems, Main parts: airframe, propulsion, control, and payload systems, Drone Types: Multi-rotor for agility, Fixed-wing for endurance, Single rotor and Hybrid VTOL for flexibility, Market expectation by 2028 driven by innovation and adoption, Core Technologies Driving Drone Innovation, Applications Across Industries: Real-World Examples, Autonomous navigation and obstacle avoidance, Precision agriculture, Search and rescue, Mapping and surveying, Inspection and monitoring, Delivery and logistic, Innovative Drone Deployments etc.

The Seminar ends with the vote of Thanks by Mr. M. Harish, Assistant Professor, Aeronautical Engineering Department by 12.45 pm.

Some of the photos of the Guest Lecture are as below:

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Five-Day Faculty Development Program on Drone Intelligent Systems:

The Department of Aeronautical Engineering, Hindusthan Institute of Technology, organized a Five-Day Faculty Development Program (FDP) on "Drone Intelligent Systems" from 26th May to 30th May 2025. The program was designed to equip faculty members with comprehensive knowledge of modern drone technologies, intelligent algorithms, regulatory frameworks, and industrial applications, with a strong emphasis on hands-on learning and research orientation.

The FDP commenced with sessions on the fundamentals of UAVs, covering drone classifications, components, flight control principles, and diverse applications in defense, agriculture, logistics, surveillance, and disaster management. Participants were also introduced to DGCA regulations and the NPNT policy, enabling them to understand India-specific legal and safety requirements for drone operations and academic usage.

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A dedicated session on GIS-based UAV flight planning highlighted the role of geospatial data in terrain analysis, route optimization, and mission efficiency, particularly in applications like precision agriculture and infrastructure monitoring. The FDP concluded with industry-oriented discussions on agri-drones, drone-based delivery systems, and aerial mapping, providing insights into emerging business models, startup opportunities, and real-time industrial workflows.

The program witnessed active participation from 30 faculty members across Aeronautical, Mechanical, and Electronics & Communication Engineering departments. The FDP enabled participants to enhance their technical expertise, explore simulation and open-source platforms, strengthen their ability to guide student projects and research, and establish meaningful connections with industry experts.

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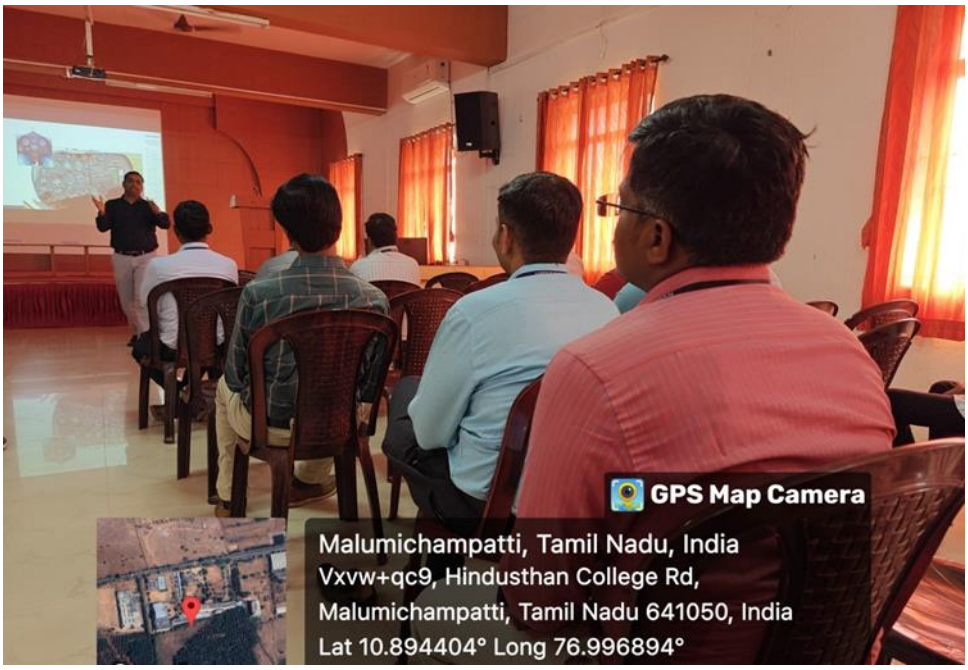

Overall, the FDP served as a valuable platform for professional development, fostering interdisciplinary learning and aligning academic practices with the evolving demands of UAV and intelligent drone systems.

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Training and Certification:

Six students have successfully completed the DGCA approved Remote Pilot Course.

S.No	Register Number	Name of the Student	Category & Class	Conducted by	Certificate Number
1	720823101008	Aswinkumar A	Rotorcraft VLOS & Small	Krusaka Unmanned and Airborne solutions Pvt Ltd, Bengaluru	KUASBLR 2508-RPCS3502
2	720823101012	Dhanvanth A N			KUASBLR 2508-RPCS3503
3	720823101017	Haripriya C			KUASBLR 2511-RPCS4002
4	720823101034	Mufeeth Rahman M			KUASBLR 2508-RPCS3505
5	720823101037	Narenkarthik K N			
6	720823101052	Sivakanya V			KUASBLR 2511-RPCS4004
7	720823101058	Vedhanayagan G			KUASBLR 2508-RPCS3507

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Flying and SIM Training for Remote Pilot Course

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DGCA approved Remote Pilot Course Completion certificates

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Flying and SIM Training for Remote Pilot Course

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Internship Training:

Four students have successfully completed Internship training at De Drone World Solutions private Limited.

S.No	Register Number	Name of the Student	Topics Learnt	Duration	Organizing Agency
1	720823101012	Dhanvanth A N	Drone Anatomy, Drone assembly/ Dis-Assembly, Calibration and Basics of drone piloting	30 Days from 10.07.2025 to 14.08.2025	De Drone World Solutions private Limited
2	720823101029	Manisha N			
3	720823101034	Mufeeth Rahman M			
4	720823101061	Roshini V			

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Internship @ De Drone World Solutions private Limited

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Internship Training with stipend:

The following Six students underwent internship training at De Drone World Solutions Pvt Ltd with stipend of Rs.5000/-.

S.No	Register Number	Name of the Student	Duration
1	720823101008	Aswinkumar A	23/09/2025 to 01/10/2025
2	720823101012	Dhanvanth A N	
3	720823101058	Vedhanayagan G	
4	720822101037	Pradeep Kumar D	
5	720822101040	Ranjith Kumar R	
6	720822101301	Arunkumar.M	

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DE DRONE WORLD
www.thedroneworld.in

CIN: U80903TN2022PTC153907
GST: 33AAJCD3361P1ZA
PAN: AAJCD4361P

DDW/Admin/Trg/DEC2025

29 DEC 2025

To:
The HOD
Aero. Department,
Hindustan college of Engineering and Technology. Coimbatore.

CERTIFICATE OF INTERNSHIP TRAINING

Mr. RANJITH KUMAR R

Respected Sir,

1. It is hereby certified that, **Mr. RANJITH KUMAR R**, has undergone Internship Training in **De Drone World Solutions Private Limited** from 23/09/2025 to 01/10/2025 .
2. During the period, he has been responsible for:
   - Coordinating, managing training programs and workshops on drone technology training courses undertaken by the company.
   - Coordinating with instructors, trainees, and administrative teams to ensure smooth execution of courses.
   - Preparing training materials, maintaining attendance, and compiling training reports.
   - Facilitating hands-on training activities and ensuring adherence to safety protocols.
3. We found his to be highly dedicated, punctual, and professional in his work. He has displayed excellent organizational skills, strong communication abilities, and dedication to maintaining the quality and efficiency of our training programs. His contribution has been valuable in upholding our standards as a leading drone technology training organization.

We wish her continued success in all her future endeavors.

With warm regards,

Wing Commander A Satish Kumar (Retd)
Managing Director & CEO
Mbl: 6380806450
Mail: md@thedroneworld.in

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Contact: 6380806450; E-mail: md@thedroneworld.in