



**HINDUSTAN**  
INSTITUTE OF TECHNOLOGY & SCIENCE  
(DEEMED TO BE UNIVERSITY)



# CENTRE FOR AUTONOMOUS SYSTEMS

**One Stop for Autonomous Drones !**



## **VISION**

To create a unique environment to facilitate and accelerate the design, development and training of the Unmanned Air Systems (UAS).

## **MISSION**

To head innovations through global participation and to lead, integrate and deliver multidisciplinary research and develop solutions in Unmanned Aerial Vehicle.

## **About the Centre**

The Centre for Autonomous Systems is the gateway to a unique environment created in HITS to facilitate and accelerate the growth of the Unmanned Air Systems (UAS) industry. Centre for Autonomous Systems is the first UAS research, training and development range of its kind among Indian educational institutes. With safety and training ,UAV operations are delivered by Department of Aeronautical Engineering, HITS & its access is enabled to :

- Unmanned air systems R&D
- Integrated unmanned air systems operating environments
- Expert technical and operational support
- Outstanding infrastructure and test facilities
- Development and demonstration flight trials
- Drone Training



**Centre for Autonomous Systems was inaugurated on 3rd October 2015 by Dr.Kiran Kumar, Chairman, ISRO**

### **RESEARCH ACTIVITIES**

**(In-house Project completed worth of 13 lakhs)**

- **Design & Testing of Rukma Vimana (Ancient Aerial Vehicle Development) VTOL UAV .**
- **Low Cost Agricultural drone for Pesticide Spraying – in progress.**
- **Swarm of drones (pairing of master & slave drone ) – in progress.**
- **High Payload Fraction Fixed wing UAV is successfully fabricated & tested.**
- **UAV with SMA as control surfaces is in progress.**
- **Assembly & Testing of Coaxial Drones- A consultancy project is in progress in collaboration with ST Advanced Composites .**



# ACCOLADES

**SCHOOL OF AERONAUTICAL SCIENCES**



**TEAM KRATOS**  
**3<sup>rd</sup> Position in ASIA PACIFIC REGION**  
**&**  
**11<sup>th</sup> Position globally**  
**in TECHNICAL PRESENTATION**  
**SAE AERO DESIGN EAST - 2020**

**SAE INTERNATIONAL**

|  |   |                                      |
|--|---|--------------------------------------|
| <b>Design Report:</b><br>4 <sup>th</sup> Position in Asia Pacific Region | <b>Venue:</b><br>Lakeland, Florida, USA | <b>Date:</b><br>6th - 8th March 2020 |
|--|---|--------------------------------------|



NASA Marshall Space Flight Center  
**Certificate of Participation**

Presented to  
**Hindustan Institute of Technology and Science**  
 Chennai Tamil Nadu, India  
 April 29, 2022

*Chitra Subramanian*  
 with Marv Bonetti  
 NASA Marshall Space Flight Center

*Chitra Subramanian*  
 Director, Student Programs Office  
 NASA Office of STEM Engagement

**POWER EXPLORATION**  
 POWER EXPLORATION



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 Department of Aeronautical Engineering

**CONGRATULATIONS!**



Mr. V Sai Heimanth Kumar (19103008) pursuing final year B.Tech Aerospace Engineering has been awarded by Asia Book of Records, India Book of Records, Universal Records Forum & International Book of Records for inventing world's Smallest & Lightest Nano Satellite with Wireless Data Transmission under the mentorship of Mr. G. Dinesh Kumar, Assistant

Department of Aeronautical Engineering

**CONGRATULATIONS!**

Team Striker won first prize in "FLIGHT FURY" an Aeromodelling Competition conducted by IIT ROORKEE (Cognizance 2023) and bagged cash prize of Rs. 2 lakhs out of 30 participating teams



TEAM MEMBERS  
 Shansha(19103043)  
 LauraMerinD(19103031)  
 DanushDatthathireyank(19103016)

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**Congratulations!**

Mr. Harikrishnan, Dept. of Aerospace, Batch 2021, CEO & Founder of Dream Aerospace Pvt. Ltd received Rs. 10 Lakhs from TANSEED 4.0 as start up fund from Honourable Chief Minister of Tamil Nadu, Thiru. M. K. Stalin.



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**STUDENT ACHIEVEMENT**



**BEST STARTUP AWARD**

IET UK, Chennai Local Network (CLN) has organized "Student Achievement Awards 2022". As part of the ceremony, different Award Categories were announced one of the award category is the "BEST STARTUP AWARD". The award is to encourage young minds pursuing B.Tech courses towards startups.

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# SAE AERODESIGN



2017



2018



2019



2020

# IAF Swarm of Drone Competition



National Level Competition open to Industry / Academics / Students

HITS Student team qualified to both

**Phase I** : 30 teams out of 1000 entries  
Venue: Subroto Park, IAF stadium on 22-Dec-2018

**Phase II** : 10 teams out of 30 teams  
Venue: AERO INDIA, Bengaluru on 21-Feb-2019



# Asia's First Flying Bike



Team “Jhatayu” was awarded by “Asia Book of Records” & India Book of Records as “Asia First Flying Bike”  
This is the first project of the University entered into the Asia Book of Records



## MoU's

- ST Advanced Composites Pvt Ltd.
- Dronoid Aerospace Pvt Ltd.
- Felix Aviation Services
- Bala Atral Solutions Pvt Ltd.



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CHENNAI



Satish Dhawan Space Center, SHAR  
Sriharikota  
Government of India - Department of Space  
India Space Research Organisation



CHANCELLOR'S  
DAY  
CELEBRATIONS

## Success of World Space Week

7<sup>th</sup> - 9<sup>th</sup> October 2022



**10000+ VISITORS ATTENDED THE EVENT**

## Throw Glider Workshop



### Contact Us:

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Chennai - 603 103,

### Visit Us:

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