

# CanSat India

## India's First of its Kind

The IN-SPACe CANSAT Student Competition is being organized by Astronautical Society of India, to inculcate the space science and technology temperament among the student community. This competition involves the design, development & launch of a CAN sized satellite to an altitude of 800 meters to 900 meters above the launch site.

The competition will also help to create a wide scale ecosystem for Swadeshi Space activities in the country and bridge the industry academia skill set gap thereby enabling the future space force creation for the AtmaNirbhar Bharat.



### Main objectives

1. Design the cansat having weight of 0.700 kg (+/- 0.050), with dimensions not more than 0.125m diameter and 0.310m height.
2. The cansat will be launched to an altitude of 800 to 900 m from the ground level.
3. The cansat will release the main and drogue chutes at different altitudes during the descent time.
4. First parachute will be released as soon as the CanSat is released from rocket.
5. The descent velocity of Cansat is 20 m/s (+/- 5 m/s) .
6. For the 2nd parachute will be deployed at an altitude of 500m (+/- 10 m ).
7. The descent velocity of Cansat will change from 20m/s to 5m/s.

# **Achievements of NSUT's Teams in CanSat USA (global competition sponsored by NASA)**

2018 - Secured Rank 20 globally out of 100+ teams

2019 - Secured Rank 12 globally out of 100+ teams

2020 - Secured Rank 10 globally out of 100+ teams

**2021 - Secured Rank 1 & 2 globally out of 200+ teams**

(Team Garuda and Team Gagan)

2022 - Secured Rank 6 & 8 globally out of 200+ teams

**All India Rank 1 and 3 (Team Garuda and Team Kalam)**

# Competition Statistics - CanSat India

TEAM SPOTLIGHT

CANSAT INDIA  
Student Competition by ISRO-ASI

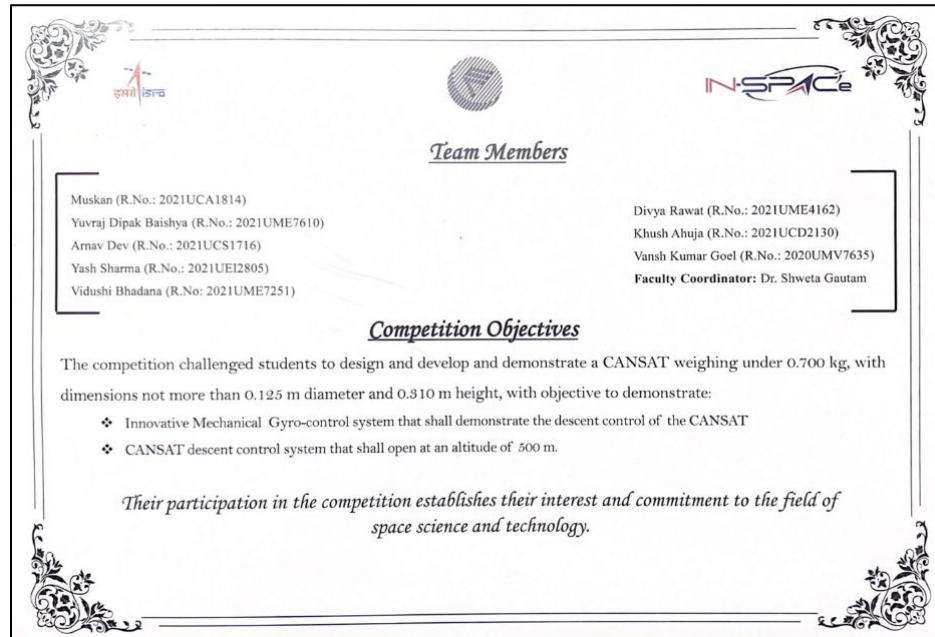
IN-SPACe CANSAT INDIA STUDENT COMPETITION 2022-23

NSUT TEAM KALPANA IS ONE OF THE 27 FINALISTS SELECTED FOR THE FINAL LAUNCH.

- For the **first time in India** the "*IN-SPACe CANSAT India Student Competition 2022-23*" is being organized by **Astronautical Society of India (ASI)** in association with **ISRO** - Indian Space Research Organization
- The competition received an overwhelming response with **82 student teams registering** from across India.
- To evaluate applications and guide the teams, a distinguished Jury of space scientists was formed.
- Following a thorough review process, **27 teams** from **across India** have been selected for the **final CanSat Student Satellite Launch** scheduled for April 16-17, 2024 at Ognaj, Ahmedabad

**NSUT'S TEAM KALPANA IS ONE OF THE 27 FINALISTS SELECTED FOR THE FINAL LAUNCH.**

# IN-SPACe CanSat India Student Competition



- NSUT's **Team Kalpana** was one of **27 finalists** selected for the launch, **out of 82 teams** across India
- Jury consisted of retired **Space Scientists** from **ISRO**
- Team Kalpana achieved major mission objectives of **communication** and **gyroscopic stabilisation**, along with on board recording and storage
- The final was graced by dignitaries including **Shri Somanath S, Chairman, ISRO** ; **Shri AS Kiran Kumar**, former Chairman, ISRO; **Dr. Pawan Goenka**, Chairman, IN-SPACe; and Dr. Vinod Kumar, Director, IN-SPACe



Final CanSat launched by  
Team Kalpana



Team Kalpana members with Shri Somanath S., Chairman,  
ISRO



Team Lead, Muskan, with  
Shri Somanath S., Chairman,  
ISRO



Team Kalpana Members



Team Kalpana with Dr. Vinod Kumar, Director, IN-SPACe