

University CanSat Challenge 2015

The Biggest Space Event Comes To India!!



About the Event:

The students' interest in space science soar through a combination of project based learning and the opportunity to use CanSats to create unique experiments correlate with such space science standards. This competition will provide the background knowledge needed to facilitate near space explorations in their own classroom. The topics include - atmospheric study & chemistry, global positioning system (GPS) technology, STEM, structure design, programming, electronics and practical experience with experimenting of design and testing of a model satellite system.

A CanSat is a simple package designed to carry lightweight experiments into near space. Students can design, construct, and launch their own model satellites equipped with standard equipment such as cameras, data-loggers, and sensors for temperature, relative humidity, tilt, acceleration and more. GPS technology is used to locate the CanSats as they return to earth and study the collected scientific data. The possibilities for new experiments are numerous and include:

- Measurement of trace atmospheric gases
 - Aerial imaging
- The effect of radiation on materials
 - Microbial Measurements
 - Descent control system
- Shock absorption in landing & other ideas

Students will be required to utilize good engineering skills in design as there are weight, size and volume constraints for the payload and go through rigorous project reviews along the project timeline. The CanSats will be launched to a particular altitude and released to carry out your experiments. The top teams around the country will be competing at the final launch place which will put the payload to test along with the structure in a launch vehicle to carry out the mission.

About the Organizers:

Antariksha Lab is the official space division of Applied Research & Development Laboratories, India. Antariksha Lab's major goal is to promote Space Research and focus on miniature satellite solutions for the Indian small satellite missions and facilitating activities at university level, such as designing, manufacturing and launching small satellites which provides students with opportunities to participate in big projects in future.

ARDL as a whole works on research areas related to integrated product design and development, industrial efficiency, aerospace/defense headway, societal convenience, open source advancements and betterment of the education sector.

Project Phases:

- Registrations
- Preliminary Design Review
- Critical Design Review
 - Pre-Launch Tests
 - Launch
- Post-Flight Review
- Winners Announcement

Registration Details:

www.ardl.org/ucc2015/register

Launch Window: January 2016

Launch Pad Region: Bangalore, India

For More Details:

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