CanSat Leadership Training Program

Two Day Space Mission Held by the Winners of the CanSat Competition, USA

Let's Go To Space

About CanSat:

A CanSat is a type of sounding rocket payload used to teach space technology similar to the technology used in miniaturized satellites. In this workshop, you will learn about developing and launching the satellite to a certain altitude to carry out the experiments and communicate with ground station for data handling and much more. A whole round experience of designing, working and launching a model satellite.

Applications:

- Measurement of trace atmospheric features
- Aerial imaging and post processing analysis
- Testing of descent control systems like aerobraking
- Telecommunications
- Testing of attitude estimation & control with IMU units and actuators
- Testing of shock absorption in landing, and other interesting ideas from students

Features, Deliverables & Planned Activities:

- Improved design with good scalability
- Fault detection & emergency fall back
- Ground station control & autonomous mode functions for fail Safe actions
- Radio beacon and decent control efficiency and area coverage
- Hand on experience on soldering, chassis fabrication and integration
- Video logging and analysis
- Fault detection modes for safe landing and data transmission loss rectification
- On board flight data storage
- Battery level detection
- Real time graphs of flight data and on screen display
- Pressure sensor for altitude detection
- Temperature sensor for protective action
- Developer kit containing all the CanSat features and Ready To Go module to work on
- Flight testing on site with live weather balloon launch filled with helium
- CanSat certification to all the participants
- End of the workshop, participant would be ready to work on a real satellite mission as next level

Gain Technical Expertise On:

- On Board Computing & Software Development
- Attitude Determination & Control System
- Command & Data Handling
- Ground Station & Telemetry
- Housekeeping & Descend Control
- Power Unit & Circuitry
- Structure & Payload Health Unit
- Integration & Test & Fault Analytics

About Antariksha Labs Community & ARDL:

Antariksha Labs Community is a part of ARDL which is an entrepreneurial research and development association which promotes Space Research and Technology Development. The base target of Antariksha Labs Community is on miniature satellite solutions for the Indian small satellite missions.

ARDL or Applied Research & Development Laboratories is a private R&D organization who's aim is to create breakthrough technologies for global development with unified research with focus being on industry, society and the education sector.

Registrations:

Rs 2250 per student (6 system officers in one group) Contact us for the application process.

Student Ambassador:

Student Ambassador program is open to students for organizing CanSat Workshop at your University with extra benefits, please contact us for further details.

Contact Us:

cansat@ardl.org
+91-7406511990, +91-9538328434
www.ardl.org/cltp