

# **CanSat Task**

## **Team A**

### **Mentors:**

Sankalp  
Debdoot  
Debal  
Prarthana  
Yashvi

### **Members:**

Girish  
Mansha

Anirudh

Kinit  
Anubhav  
Vishwajeet  
Utkarsh

## **Team B**

### **Mentors:**

Harsh  
Chiran  
Mohan  
Eshan  
Pradyumna

### **Members:**

Jatin  
Siya

Chandrashish  
Supreeth Balaji

Supreet Kaur  
Aaron felix  
Shreyas  
Farhaan

## **DATES:**

30th April → 26th May  
Presentation → 27th May

## **Problem statement**

### **2021 CanSat MISSION STATEMENT**

### **Additional Guidelines:**

- **Refer 2021 CanSat mission guide document thoroughly for details**
- Use the PDR template from CanSat website for the presentation and only complete the following subsections
  - Sensor Subsystem Design
  - Descent Control Design
  - Mechanical Subsystem Design
  - Communication and Data Handling Subsystem Design
  - Electrical Power Subsystem Design
  - Flight Software Design

- Ground Control System Design

**Note:** Elec+CSE per team needs to make a github repository and share the link to the mentors on 26th May

#### Electrical

- Use only 1 XBee in the carrier.
- Write the Arduino program.
- Generate the gerber files for the PCB
- Add the arduino program and PCB related files in the repository.

#### CSE

- No need to implement MQTT
- Add the GUI and website files in the repository
- Website guidelines
  - Develop a website to showcase your team's CanSat.
  - The website shall display an overview of the whole Cansat, the CONOPS and major features of your Cansat, like the design of the container and payloads, and a brief and relevant description.
  - Demonstrate various subsystems in the CanSat with images (Ex: The PCB design, the container and payload sub-structures)
  - The UI has to be built using React, and is expected to be as clean and crisp as possible.
  - The website shall contain animations/graphics, to make the UI look better. The visuals to be included and their placement are left open for the team's imagination. You can use **Three.js** library for implementing the same.
  - Optionally, you can also add a 3D model of your Cansat, and any other Cansat related components.
  - Include information about your team, the work division, and the team's contact info
  - **Deploy your website using Github Pages**