

Payload Design Contest



PRSS illustration

Challenge:

To design a payload for satellite in space. The payload can be any sensor/ electronic equipment that can be used in any kind of satellite such as weather, communication, navigation, earth observation, surveillance etc.

What is a satellite payload?

A satellite payload can be referred as the primary equipment of the satellite used to perform the mission objectives.

Rules & Guidelines:

- Competition is open for university students only
- Interested students may participate in the competition as individual or team of maximum five students
- The participant(s) must define the type of satellite selected for payload design
- The designed payload must match the selected satellite type. For example, if earth observation satellite is selected, the payload may be a design of camera/ imager/ imaging scanner etc
- The payload design will be qualitatively judged on the basis of design report submitted as per given format
- Logos of SUPARCO and WSW must be displayed and clearly visible on the designed payload hardware/ hardware prototype
- One picture of participant(s) with payload is mandatory
- One minute video of working mechanism of payload is also mandatory
- Last date to submit design report for payload Contest is **10 Oct 2020**

How do I win?

To be eligible for winning the competition, the challenge and report requirements must be met as per details mentioned above.

Judging Scorecard

The judging panel will rank the submitted entries using the following Judging Scorecard:

Metric	Weightage
Challenge fulfillment	25%
Novelty and Innovativeness	25%
Submission of Technical Report	25%
Submission of support media (Pictures/ Videos etc)	25%

Report Requirements

1. **Participation Details** *(Add details of all team members)*

- a. Name of Participant(s): _____
- b. Name of University: _____
- c. Department: _____
- d. Year/ Semester: _____
- e. Contact No: _____
- f. Contact Email: _____
- g. Contact Address: _____

2. **Project Details**

- a. Objective/ Challenge Description
- b. Selected satellite type
- c. Payload Design description
- d. List and specifications of hardware
- e. List and specifications of software
- f. Flow diagram of operation/ working
- g. Circuit diagram
- h. Schematic diagram/ CAD 3D diagram
- i. Software simulation (optional)
- j. Programming Code (optional)

3. **Project Supporting Media**

- a. Video of working payload
- b. Picture of payload/prototype (Logos of SUPARCO & WSW are mandatory)
- c. Picture of payload/prototype with participant(s)