**Universities & Students...**

Compete to Build **SMALL SATELLITES** with **HELP** from NASA & the Air Force and Space Force!*

# MISSION CONCEPTS - 1 (MC-1): 2023 SUMMER SERIES

*Participation in MC-1: 2023 Summer Series does not guarantee future selection in the full UNP or CSLI competitions.

## About Mission Concepts - 1: 2023 Summer Series

A solicitation for the new University Nanosatellite Program (UNP) course, the Mission Concepts - 1: 2023 Summer Series, will be released in **EARLY JANUARY 2023**.

These hands-on engagements from **MAY TO AUGUST 2023** will help universities elevate their efforts to build small satellites and enhance their potential to be selected for the full **Air Force Research Laboratory (AFRL) UNP** in 2024 and **NASA CubeSat Launch Initiative (CSLI)** in November 2023.

The Air Force, Space Force and NASA are collaborating on this new effort to broaden access to space and strengthen the capabilities and knowledge of higher education institutions, faculty, and students.

## WHY PARTICIPATE?

- Funding level (up to $70k) alleviates participation difficulty for teams.
- Faculty no longer required to deal with other funding sources.
- Up to 4 students get summer internship at AFRL.
- Allows faculty & students to form teams without draining university resources.
- Includes travel funding for kickoff, final event, and any in-person reviews.
- Now is the time to get ready for space opportunities in late 2023 & 2024!

## WHO CAN APPLY

Teams at minority-serving institutions & HBCUs are strongly encouraged to apply.

All colleges & universities should provide a robust DEIA component in their proposals.

The program intends to select up to ten teams as funding allows.

## HOW TO APPLY

Interested universities can submit proposals to be reviewed for educational impact, university program development & impact, DEIA support/alignment, and DoD and/or NASA relevance.

More information about the solicitation will be available online in January at **https://universitynanosat.org/solicitation/**. The call for proposals will be **OPEN FOR FOUR WEEKS** with notifications planned during late **FEBRUARY 2023.**

Please contact info@universitynanosat.org at Air Force Research Laboratory OR norman.l.phelps@nasa.gov & jose.l.nunez@nasa.gov at NASA with questions. We look forward to your submissions!


UNP

20 + YEARS
40 UNIVERSITIES

8 LAUNCHES
15 SATELLITES

# UNIVERSITY NANOSATELLITE PROGRAM

## About UNP

The United States Air Force and Space Force are committed to educating the workforce of the future. UNP maximizes educational impact through its goals to:

- **Produce** quality personnel for the workforce.
- **Support** universities to increase their impact.
- **Leverage** innovation at universities.

Established in 1999 by the Air Force, UNP was the first federally funded program dedicated to university participation in spacecraft development and nearly 5,000 students from 38 U.S. universities have participated thus far.

## Full UNP Process

Guided by years of spacecraft development history, the UNP structure is divided into four distinct phases. Successful completion of each phase is accomplished through specific entrance and exit criteria. Phases include various reviews and program down-selects intended to help as many teams as possible achieve successful spacecraft mission operations.

### Phase A
### DESIGN AND DEVELOPMENT

- Emphasize design process from system concept to critical design review maturity.

### Phase B
### INTEGRATION AND TEST

- Support satellite assembly, integration, and testing.

### Phase C
### ENVIRONMENTAL TEST

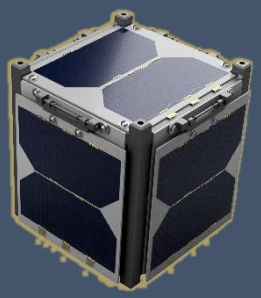
- Provide environmental testing capabilities including bake out, thermal cycling, vacuum & vibration tests
- Finalize with Space Test Program & launch vehicle.

### Phase D
### MISSION OPERATIONS

- University teams operate spacecraft
- AFRL serves & advises in operations & data transfer.

AIR FORCE RESEARCH LABORATORY · KIRTLAND AIR FORCE BASE, NEW MEXICO

info@universitynanosat.org | https://universitynanosat.org/



110+ UNIQUE ORGS
95+ SCHOOLS

148 LAUNCHED
140+ DEPLOYED

38 CURRENTLY MANIFESTED


# NASA CUBESAT LAUNCH INITIATIVE

## About STEM Engagement at NASA

NASA informs the public about its unique mission and engages the next generation of explorers through mission-related science, technology, engineering, and mathematics (STEM). The agency's Mission Directorates and Office of STEM Engagement (OSTEM) work to:

- **Create** unique opportunities for students to contribute to NASA exploration & discovery.
- **Deliver** tools for students and educators to learn and succeed.
- **Build** a diverse future workforce by engaging students with NASA people, content & facilities.

The **CubeSat Launch Initiative (CSLI)** provides U.S.-developed small satellites with flights as auxiliary payloads on previously planned launches or commercial missions to low-Earth orbit & deep space, as well as ISS deployments.

One of four major OSTEM focus areas, **Minority University Research & Education Program (MUREP)** investments enhance academic, research and technology capabilities of minority-serving institutions (MSIs).

## The CSLI Process

For the annual CSLI process, NASA begins by releasing a call for proposals, typically during August of each year. Responses are usually due in November, with selections traditionally occurring during March of the following year. This includes a funding amount allocated for final integration and launch. The CSLI process has four parts.

### Part 1
### PROPOSAL

- NASA solicits proposals through an Announcement of Partnership Opportunity.
- Eligible Organizations submit proposed CubeSat Missions in response.

### Part 2
### SELECTION

- NASA Committee reviews proposals.
- Committee makes final recommendations
- NASA announces final selections.

### Part 3
### DESIGN & BUILD

- Selectee builds satellite.
- Selectee raises all funds for satellite construction.
- Selectee provides completed satellite to NASA for launch integration.

### Part 4
### MANIFEST & LAUNCH

- NASA manifests satellite, Orbital Debris Assessment.
- Reimbursable agreement executed by NASA.
- Launch operations and CubeSat deployment.
- Mission operations (selectee), reentry occurs.
- Selectee submits written report to NASA.

NASA KENNEDY SPACE CENTER · MERRITT ISLAND, FLORIDA

Norman Phelps (norman.l.phelps@nasa.gov) | Jose Nunez (jose.l.nunez@nasa.gov) | https://go.nasa.gov/CubeSat_initiative/