



**Team Experience and Competition Grant Program  
2022-2023 Academic Year**

**Project Period:  
Nov. 1, 2022 to July 15, 2023**

**REQUEST FOR PROPOSALS**

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Proposal Submissions Due: Friday, Oct. 14, 2022 (6 p.m., EDT)  
Anticipated Award Announcement Date: Oct. 24, 2022

## 2022-2023 Student Team Experience and Competition Grant Program

### Background

NC Space Grant awards funding to student teams (undergraduate and graduate) led by faculty Principal Investigators (PIs) to help them participate in national competitions either sponsored or sanctioned by NASA or another science technology, engineering, and math (STEM) related organization or industry. Examples of such competitions are NASA Student Launch Initiative, NASA Human Robotics Competition, NASA Lunabotics, NASA BIG Idea Challenge, First Nations Launch, Spaceport America Cup, etc. Competitions should be in the fields of science, technology, engineering or mathematics (STEM) and complement the academic studies of team members.

### Objectives

Competitions should be in the fields of engineering, science, technology and/or mathematics (STEM), and complement the academic studies of the team members. Competitions must provide students with a hands-on experiential learning opportunities related to one or more of NASA's Mission Directorates.

NASA Mission Directorates include:

- [Aeronautics Research](#)
- [Human Exploration and Operations](#)
- [Science](#)
- [Space Technology](#)

NC Space Grant invites faculty Principal Investigators (PIs) to propose collaborative team work experiences toward a challenge or competition, which must be named in proposal and take place within the period-of-performance of this award. NC Space Grant recognizes that some competitions may be modified (i.e., virtual or remote competition) due to the impacts of COVID-19. All proposers must adhere to state and college/university COVID-19 policies and to classwork, teamwork, labs, travel and any other competition/challenge guidelines. NC Space Grant should be notified of any impacts and changes in the proposed scope of work due to COVID impacts.

Teams should be interdisciplinary in composition. Team members within different majors, departments, and/or with skills such as business and marketing, communications and social media, and education and outreach are encouraged to participate. NC Space Grant strongly encourages teams to recruit and include members with diverse backgrounds and perspectives in alignment with our values of diversity, equity, inclusion, justice and accessibility ([DEIJA](#)). NC Space Grant strongly encourages proposals from historically black colleges and universities (HBCUs) and minority serving institutions (MSIs).

NC Space Grant anticipates supporting up to 10 team competition grants of up to \$5,000 each contingent on available funding and strength of proposals.

### Award Details

- NC Space Grant anticipates supporting up to 10 team competition grants of up to \$5,000 each based on available funding and strength of proposals.

- Funds can be used to purchase supplies and materials to support the team project, and/or cover registration and travel expenses.
- The period of performance for this project is Nov. 1, 2022 to July 15, 2023 (≈ 9 months). NC Space Grant understands that some competition dates may extend beyond the POP (e.g., into August), and that must be noted in the proposal.
- A team may apply for only one award. However, the same college or university may apply for multiple awards as long as funds are used for different challenges or competitions.

### **How to Apply**

- Proposals must be submitted by the faculty advisor, who will serve as the Principal Investigator, as a single PDF file via the [NC Space Grant online submission system](#).
- Submissions must be signed by the PI's university's Office of Sponsored Research or equivalent. Projects selected for funding will receive a sub-award through the PI institution's Office of Sponsored Research.
- Proposals should be one-sided, single-spaced on standard 8 ½ x 11 paper, no smaller than 12-point font and with no less than one-inch margins throughout. Text restrictions are inclusive of all illustrations, tables, charts, exhibits, etc. All pages must be numbered sequentially.
- Award announcements will be made on approximately Oct. 24, 2022.

### **Proposal Guidelines**

All proposals MUST include the following information in the order noted below. Proposals not meeting these requirements may not be considered.

Project Content (not to exceed 10 pages):

#### **1. Summary of the Team Competition**

Proposers shall state the defined goal or objective of the competition/challenge. Proposers must provide an active web link to the competition/challenge that will take place during the award period-of-performance (POP). NC Space Grant understands that some competition dates may extend slightly beyond the POP (e.g., into late August), this must be noted in the proposal.

#### **2. Project Description**

Proposers shall provide a description of their project and how it meets the goal or objective of the competition/challenge.

Proposers shall describe significant tasks, milestones, requirement check-ins and competition dates. Images and tables are allowed to support the narrative.

#### **3. Description of Team Goals and Learning Objectives**

Proposers shall provide one of the following.

A. For returning teams, a summary of the team's past participation, lessons learned and planned adjustments, modifications, etc. for this cycle.

B. For new teams, a description why the particular competition/challenge was selected and what the team hopes to learn and accomplish.

#### **4. Alignment to a NASA Mission Directorate**

Proposers must describe how their project is aligned to a [NASA Mission Directorate](#). NASA Mission Directorates include:

- [Aeronautics Research](#)
- [Human Exploration and Operations](#)
- [Science](#)
- [Space Technology](#)

## 5. Summary of Team Composition and Member Recruitment

A narrative description and/or a table with student team information, e.g., names, majors and/or skills sets (e.g., electrical engineering, computer programming, biology, atmosphere science, etc.) and/or team roles and responsibilities (e.g., club president, team leader, task lead, documentation lead, social media lead, public outreach coordinator, etc.) is required. Teams are encouraged to consider roles for non-STEM team members, such as fundraising, outreach and education, communications and social media, etc.

If the composition of the team is unknown at the time of proposal submission, the proposer MUST describe plans for student recruitment. NC Space Grant values diversity, equity, inclusion, justice and accessibility ([DEIJA](#)) for team members. Teams with diverse composition will be more favorably reviewed.

Refer to the section below, **Required Reporting**, for student data table and other reporting requirements. Please note that student data tables containing demographics and other information is required for all NASA funding and reporting under this grant.

## 6. Outreach Plan

Outreach is not required in all competition/challenge guidelines; however, it is the [mission of NC Space Grant to engage and inspire the next generation of explorers](#). Therefore, teams that include an outreach component to pre-college and/or public audiences will be more favorably reviewed. Proposers should include a description of in-person outreach and/or online/remote learning tools (proposers must strictly adhere to COVID-19 policies at their institutions and for targeted outreach). This is an opportunity for teams to be creative, such as using an authorized YouTube channel, an online demo or launch, shared open-source materials, etc.

Additional Required Content (no page limit unless otherwise noted):

7. **Curriculum Vitae** of the Faculty Principal Investigator (PI)/Advisor (two pages max).
8. **Letter of Support** from the Department Chair/Head that outlines the importance of the proposed project to the department and/or the direction of the university.
9. **Budget and Budget Narrative** that includes a required one-to-one (1:1) cost match (use budget template in Appendix A). Funds can be used to purchase supplies and materials to support the team project, cover registration, and/or pay travel expenses. NASA grant funds cannot be used to purchase equipment. NC Space Grant does not allow facilities and administrative (F&A) costs. Unrecovered F&A costs may be used for required cost-matching. We strongly recommend that cost-match not exceed the \$5,000 award since proposers will be obligated to report all proposed cost-match. PIs are responsible for following all internal institutional guidelines for committing to cost-share, including necessary approvals.

No-cost extensions are not allowed. All funds must be expended within the competition year.

## Eligibility

- A faculty member or instructor must be the Principal Investigator (PI), although strong student involvement and leadership is the intention of this grant, including in proposal writing.
- Proposals will be accepted from teams at accredited higher education institutions only within the State of North Carolina.
- Team members must be enrolled in an academic degree program.
- The competition must occur during the 2022-2023 academic year or during the summer of 2023.
- Some competitions require that team members be full-time students and/or U.S. citizens. Applicants should review all competition or program requirements and make sure the entire team is eligible to participate before submitting this proposal.
- Release of funds is contingent upon acceptance into competitions/challenges for those with a competitive application process.

### Period of Performance

The period of performance for this project is Nov. 1, 2022 to July 15, 2023 ( $\approx$  nine months). NC Space Grant understands that some competition dates may extend beyond the POP (e.g., into August), and that must be noted in the proposal. No-cost extensions are not allowed. All funds must be expended within the competition year.

### Required Reporting

*Please note that reporting requirements have been changed from previously released RFPs due to changes within NASA's Office of STEM Engagement reporting requirements, which NC Space Grant is obligated to meet.*

**1. Student participant data tables are required by NASA.** Data tables with student demographic and other information must be submitted in accordance with NASA reporting guidelines and due dates. Student data tables must be submitted to NC Space Grant in accordance with this request. NASA typically issues three requests for student data per year according to the following calendar: November, February, and July. Awardees must submit student data tables with all required fields completed at these times. NASA may request data at other times, in which case we are required to respond.

NOTE: The collection and submission of student data is a REQUIREMENT of the NASA Office of STEM Engagement in order for NC Space Grant to receive annual funding. As a result, **all NC Space Grant funded projects MUST report student participant data (e.g., name, date of birth, gender, race, ethnicity, email address, contact hours, and field of study, etc.)**. To protect Personally Identifiable Information (PII), NC Space Grant utilizes reporting systems that are FERPA compliant and meet or exceed the United States Department of Education Privacy Technical Assistance Center and the Student Privacy Policy Office data security recommendations.

During these data calls, on behalf of NASA NC Space Grant may also request information on publications, presentations, papers, patents, etc.

**2. A final report is due no more than 30 days after completion of the period of performance** (i.e., no later than Aug. 15, 2023). This report should include a description of progress toward significant tasks, milestones, requirement check-ins, etc. This report will also request information about presentations,

publications, patents, etc. under this award. If the competition has taken place, results should be reported, as well as feedback from students (e.g., quotes) about their experience. The report shall also note any changes to the student participant data table. Please note that some competition dates will take place after the grant period of performance. In those cases, teams MUST submit an amendment to their final report following the challenge or competition posted results, student data tables, and presentations, publications, patents, etc. under this award. NC Space Grant should be notified of any impacts and changes in the proposed scope of work due to COVID or other unforeseen impacts.

### **Awardee Expectations**

- All proposers MUST strictly adhere to the State of North Carolina and college/university COVID-19 guidance for classwork, teamwork, labs, travel and other relevant policies and procedures. Safety first!
- The PI and designated team members shall collaborate with the NC Space Grant communications specialist to develop and implement a plan to share progress and experiences, including but not exclusively on social media, in print and on the NC Space Grant website.
- The PI and designated team members shall make activity and results public via social media during and after their projects, using accessible social media accounts and consistent hashtags (e.g., #yourteamname and/or #ncspacegrant).
- NC Space Grant shall be given credit for sponsoring the activity in all printed materials (e.g., logo, social media, etc.). Logos can be obtained from Sandy Canfield at [srcanfie@ncsu.edu](mailto:srcanfie@ncsu.edu).
- Teams are strongly encouraged to participate at the NC Space Grant Space Symposium, Apr. 21, 2023. Teams are encouraged to set up a model or demonstration of their project. There is no registration cost to attend the symposium for designated students who will run the model or demo. However, grant funds awarded through this opportunity are considered sufficient to cover travel costs to the symposium, including transportation of any equipment.
- NC Space Grant is **required** by NASA to longitudinally track all recipients of significant awards ( $\geq 160$  contact hours) *at least* until they receive their first job after receiving their highest degree. PIs should have all students log contact hours on this award to be reported in the student data tables.

### **Contact**

For questions related to this solicitation, please contact:

Sandy Canfield  
Assistant Director  
NC Space Grant  
(919) 515-5943  
[srcanfie@ncsu.edu](mailto:srcanfie@ncsu.edu)

**APPENDIX A: BUDGET TEMPLATE**

Period of performance: November 1, 2022 to July 15, 2023

Maximum budget request: \$5,000

1:1 cost match required

**BUDGET DESCRIPTION:**

Enter University Here			
Enter Faculty Advisor and Team Leader Names Here			
	<b>NASA Funding</b>	<b>Cost Share****</b>	<b>Total</b>
Salaries	x		
Travel			
Supplies and materials*			
Services	x		
Equipment	x		
Student Salaries/Stipend	x		
Other (Explain)**			
Indirect Costs***	x		
	<b>NASA Funding</b>	<b>Cost Share</b>	<b>Total</b>
<b>TOTAL:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

\* Funds are limited to supplies and materials and travel only.

\*\* Registration expenses should be categorized as 'Other'.

\*\*\* The NC State University/NASA National Space Grant College and Fellowship Program do not allow facilities and administrative costs. Unrecovered facilities and administrative costs may be used to meet the required cost-match.

\*\*\*\* NC Space Grant does not recommend exceeding the cost-share requirement.