



# NC Space Grant Graduate Research Fellowship 2023 – 2024

## Objective

The objective of the NC Space Grant Graduate Research Fellowship program is to encourage graduate students to pursue research and careers in STEM fields that support NASA's Mission Directorates.

## Overview

Each year, NC Space Grant competitively awards Graduate Research Fellowships to students pursuing degrees in science, technology, engineering and mathematics (STEM) fields that support NASA's Mission Directorates.

The NC Space Grant Graduate Research Fellowship program provides support for graduate students to supplement and enhance basic and/or applied research. The program requires that students participate in an active, defined research activity in STEM fields that have NASA Mission Directorate applications, inclusive of commercial space or at the U.S. National Lab on the International Space Station (ISS).

The research should be supervised by a faculty mentor, and may be conducted virtually, on the home campus in accordance with university policies, and/or at an industrial or government facility.

The research activity will be conducted over the course of a 12-month period, commencing June 1, 2023 and ending no later than May 31, 2024. Extensions will not be granted. Proposed research must take into consideration obtaining samples or other supplies and materials needed to carry out the research, as well as accessing labs or specialized equipment.

## Award Level

This is a competitive scholarship program. Awards are based on merit, recognizing high academic achievement and promise.

NC Space Grant will grant \$10,000 per award, for up to 13 student awards. Funding for related travel should be considered within the total award package.

Awards are contingent upon receipt of NASA funding and the quality of submitted proposals.

## Eligibility Requirements

Applicants must be enrolled full-time in a program of study in STEM and have a specific research project with NASA, commercial space, or ISS relevance.



# NC Space Grant Graduate Research Fellowship 2023 – 2024

NC Space Grant strongly encourages applications from graduate students from historically black colleges and universities (HBCUs) and minority serving institutions (MSIs) and/or from historically underserved and underrepresented communities.

The Graduate Research Fellowship applicant must be:

- A United States citizen.
- Currently enrolled, or planning to be enrolled in fall 2023, in a full-time, advanced degree program of study in science, technology, engineering or math (STEM) at any accredited university or college in the State of North Carolina. Students who drop below full-time status are no longer eligible to receive funding.
- Conducting a research project that has relevance to a NASA Mission Directorate, commercial space, and/or the ISS.
- In good academic standing with a GPA of 3.0 (out of 4.0).

Applicants are eligible to receive a total of two Graduate Research Fellowships during their academic studies. Students must apply each time to the competitive application process.

## Deadlines

- **Student applications due – 5 p.m. ET, Monday, March 13, 2023. Late applications will not be accepted for any reason.**
- **Faculty Letter of Recommendation due – 5 p.m. ET, Wednesday, March 15, 2023.**
- Awards will be announced on or around April 28, 2023, contingent upon receipt of NASA funds.

## Application Instructions

**Apply for the NC Space Grant Graduate Research Fellowship online at:**

**<https://ncspacegrant.ncsu.edu/programs/graduate-research-fellowship/>.**

- *In the application system, applicants must click the new user registration button to begin the application process.*

Interested students must complete an online application. All information must be complete — including a faculty letter of recommendation — or the application will not be reviewed.

Please read all program guidelines, including Eligibility Requirements, Proposal Review and Evaluation Criteria, and Awardee Requirements before preparing and submitting your application.

Awards are based on research merit and promise, adherence to the instructions of this request for proposals (RFPs), and availability of federal funds.



# NC Space Grant Graduate Research Fellowship 2023 – 2024

Students will respond in short essay format to four (4) key questions in the online application. Maximum page counts are provided below for each essay. Each essay response must be uploaded as a separate PDF document (i.e., 4 separate PDFs). NC Space Grant allows charts, graphs, tables, images, reference lists, etc. within the uploaded PDFs — not uploaded as separate files — and may not exceed the allowable page limit. Essay responses should be in 12-point, Times New Roman font, with 1-inch margins.

- **Description of the Proposed Research Project:** Four (4) essays written by the student applicant should describe:
  1. **Research Interests, Goals, and Anticipated Findings.** (Maximum 2 pages) In your own words describe the research project that you will be conducting, the purpose of the research, and the anticipated findings.
  2. **Research Plan.** (Maximum 5 pages) The description should include but not be limited to a description of the research plan (methodology), start and end dates, critical benchmarks and milestones, and how you will work with your research mentor for the term of the award.
  3. **Alignment of Research to NASA Mission Directorates and the NC Space Grant Strategic Plan.** (Maximum 2 pages) Identify which NASA Mission Directorate that your research project aligns with and describe how your research will contribute to the mission of that Directorate. Describe how your research project supports the NC Space Grant mission and strategic plan (see details below).
  4. **Career Impact.** (Maximum 2 pages) What are your career interests? Describe how this research project will be a springboard to pursuing your career interests. What new skills or information will you obtain that will impact your career pursuits?

It is expected that research will be conducted over the full 12-month award period-of-performance. A timeline for research implementation must be included in the proposed research plan. Deviations from a 12-month plan must be included in the online application essay, and discussed with the NC Space Grant point-of-contact listed at the end of the RFP in advance of award. Funds will be appropriately prorated for any semester the student is not enrolled full-time (i.e., not receive the full amount of the award).

- **Alignment of Research to NASA Mission Directorates and the NC Space Grant Strategic Plan:** Identify which NASA Mission Directorate(s) your research project aligns with and describe how your research will contribute to the mission of that Directorate, commercial space, and/or the ISS. Describe how your research project supports the NC Space Grant Mission and Strategic Plan.
  - NASA Mission Directorates: [Aeronautics Research](#), [Human Exploration and Operations](#), [Science](#) and [Space Technology](#)
  - [NC Space Grant Strategic Plan](#)



# NC Space Grant Graduate Research Fellowship 2023 – 2024

- **Faculty Letter of Recommendation:** Applicants should request that a faculty member write and submit a letter of recommendation that addresses knowledge of the student or level of confidence in the student's ability to carry out the proposed research or, alternatively, a plan to guide the student's STEM interests or research.

Applicants will provide the name and contact information for the faculty reference in their online application. NC Space Grant will contact the reference via email to request a letter of recommendation on behalf of the applicant. The reference will be provided with a link to submit the recommendation. For the application to be complete, the letter of recommendation must be submitted by the due date stated in this RFP (5 p.m. ET, Wednesday, March 15, 2023). NC Space Grant strongly recommends that students contact the reference listed to notify him/her an email requesting this information on the student's behalf is coming (from the address [notices@spacegrant.net](mailto:notices@spacegrant.net)).

- **University Transcripts:** Unofficial transcripts from all institutions and from the current institution with grades through fall 2022 are required and can be submitted as a PDF in the online application. Applicants must submit one transcript from each institution of higher education attended during fall 2022, whether as an undergraduate or graduate student. If the applicant is selected to receive the award, official transcripts may be required at time of acceptance. If the applicant does not have a PDF conversion tool, links to free online PDF converters are provided within the application.

## Proposal Review and Evaluation Criteria

Proposals will be reviewed by a panel of academic and subject-matter professionals who are technically literate, but not necessarily experts in each proposed field of research. Applicants should present their research project in a way that will be understandable to a range of readers. Proposals will be evaluated and scored per the parameters below:

- Research Interests and Goals (30%)
- Research Plan (30%)
- Alignment of Research to [NASA Mission Directorates](#) and the [NC Space Grant Strategic Plan](#) (10%)
- Anticipated Impact (20%)
- Letter of Recommendation (10%)

The selection of awarded proposals will reflect the full review process, available funding, and current program priorities. Applicants should be aware that not all highly rated projects will be funded. NC Space Grant does not have sufficient funding to cover all the outstanding applications we receive.

## Awardee Requirements



# NC Space Grant Graduate Research Fellowship 2023 – 2024

The Graduate Research Fellow must meet the following requirements:

- Submit a final research report to NC Space Grant.
- Present a poster at the NC Space Grant Space Symposium in spring 2024. Funding for related travel should be considered within the total award package (e.g., to Raleigh, NC).
- Respond to academic and employment requests for information and/or surveys administered by NC Space Grant and/or as required by NASA.
- Share research experiences in public forums or educational settings. Presentations that encourage interest in STEM fields to high school students are of particular interest to NC Space Grant.
- Work with the NC Space Grant communications team to develop and implement a plan to share research and experience, including but not exclusively on social media, in print and on the NC Space Grant website.
- Make activity and results public via social media during and after their research, using accessible social media accounts and consistent hashtags.
- Credit NC Space Grant for sponsoring the activity in all printed materials (e.g. use the NC Space Grant logo on posters, credit and tag on social media, etc.).
- Notify NC Space Grant if you drop below full-time status.
- Update your profile in Payment Works if any of your contact information changes.

## Virtual Information Sessions

There will be three virtual information sessions about this opportunity. For more information and for required session registration, please click [here](#).

## Recent Research Scholars

Read about the 2022-2023 Undergraduate and Graduate Research Scholars [here](#).

## Contact

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