Undergraduate Research Scholarship Program

Objective

The objective of the Undergraduate Research Scholarship program is to engage the future STEM workforce in basic and/or applied NASA-related research projects.

Overview

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

The Undergraduate Research Scholarship Program requires that students participate in an active, defined research activity in STEM that has NASA Mission Directorate applications, inclusive of commercial space and/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, 2022 and ending no later than May 30, 2023.

Award Level

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

NC Space Grant will grant $8,000 per student for up to 10 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 relevant to a NASA Mission Directorate, commercial space, and/or the ISS U.S. National Lab.

Undergraduate Research Scholarship Program

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

The Undergraduate Research Scholarship applicants must meet the following requirements:

- A United States citizen.
- Pursuing a bachelor's degree in a science, engineering, technology, or mathematics (STEM) discipline of interest to NASA, commercial space, or the ISS.
- Enrolled as a full-time student at an accredited university or college in the State of North Carolina during the 2022-2023 academic year. Students enrolled in an accredited Dual Engineering Degree program are also eligible to apply. Students who drop below full-time status are no longer eligible to receive funding.
- Conducting a specific faculty-mentored research project that has NASA Mission Directorate or commercial space relevance.
- In good academic standing with a GPA of 3.0 (out of 4.0).

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

Deadlines

- **Student applications – 5 p.m. ET, Monday, March 14, 2022. Late applications will not be accepted for any reason.**
- **Faculty Letter of Recommendation – 5 p.m. ET, Wednesday, March 16, 2022.**
- Awards will be announced on or around April 25, 2022, contingent upon receipt of NASA funds.

Application Instructions

Apply for an NC Space Grant Undergraduate Research Scholarship here.

- *Applicants must click the new user registration button to begin the application.*

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

Undergraduate Research Scholarship Program

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 (RFP), and availability of federal funds.

Students will respond in short essay format to four (4) key questions in the online application. Maximum word counts are provided for each essay, which is indicted after each question in the online application system. Students can also view word counts in advance of registering in the system in the Sample Application available on the application website page.

1. **Research Description and Goals:** In your own words, describe the research project that you will be conducting. The description should include but not be limited to a) a description of the research, b) research goals, and c) a plan to carry out the research (e.g., methodology, timeline, etc.).

   It is expected that research will be conducted over the full 12 month award period-of-performance. A timeline for research implementation is recommended to be included in the proposed research plan (tables may be included but not charts, graphs or photos). Deviations from a 12 month plan (e.g., early graduation or other circumstances) 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).

2. **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(s), 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

3. **STEM Research:** Describe your interests in a NASA-related STEM field of study and how this research project supports your interests.

4. **Anticipated Impacts:** Describe how the proposed research project will be a springboard to pursuing your future academic and/or career interests and pathways, i.e., what new skills or information will you obtain from this project that will impact your pursuits?

Faculty Recommendation Letter: Applicants should request 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. 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. NC Space Grant suggests that applicants contact the reference listed and inform them that they will receive an email requesting this information on their behalf (notices@spacegrant.net).

University Transcripts: Unofficial transcripts from all institutions and from the current institution with grades through fall 2021 are required and can be submitted as a PDF in the online application. If the applicant is selected to receive the award, official transcripts will be required at time of acceptance. If the applicant does not have a PDF conversion tool, links to free on-line 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 Description and Goals (35%)
- Alignment of Research to NASA Mission Directorates and the NC Space Grant Strategic Plan (20%)
- STEM Research (15%)
- Anticipated Impacts (20%)
- Faculty Recommendation Letter (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 enough funding to cover all the outstanding applications that we receive.

Awardee Requirements

The Undergraduate Research Scholar 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 2023. Funding for related travel should be considered within the total award package.
- Respond to academic and employment follow-up surveys administered by NC Space Grant as required by NASA.
- Work with the North Carolina 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 North Carolina Space Grant website.
- Share their 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.
- Make activity and results public via social media during and after their research, using accessible social media accounts and consistent hashtags.
- Credit NCSG 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

Recent Research Scholars

Read about the 2021-22 Undergraduate and Graduate Researchers here.

Contact

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