

The Minority Serving Institutions (MSI) Science, Technology, Engineering and Math Bridge Scholarship

Background

The National Space Grant College and Fellowship Program (Space Grant) champions diversity, equity, inclusion, justice, and accessibility (DEIJA) by recruiting, retaining and preparing a diverse workforce, and proactively engaging and serving diverse populations. North Carolina Space Grant (NC Space Grant) is committed to building inclusive research, education and public outreach programs that serve people with unique backgrounds, circumstances, needs, perspectives and ways of thinking.

Recognizing that some students have historically been underserved and underrepresented (i.e., minority groups that are not represented in the science, technology, engineering or math (STEM) fields in numbers proportional to their composition in the U.S. population), NC Space Grant supports scholarships targeted to these individuals in order to help diversify the STEM workforce of the future. This is in accordance with NASA's aim to "enhance the capabilities of Historically Black Colleges and Universities; Hispanic Serving Institutions; Tribal Colleges and Universities; and Other Minority Universities to contribute to the research needs of science and technology enterprises." (NASA, Minority University Research and Education Programs, FAQs)

Objectives

To encourage talented students from underserved and underrepresented populations (e.g., women, minorities, and persons with disabilities) to pursue STEM related research, degrees and careers, NC Space Grant will implement the <u>MSI STEM Bridge Scholarship program</u>. This scholarship aims to facilitate access to NC Space Grant, NASA, and/or other research and scholarship opportunities by assisting undergraduate students (sophomores, juniors, and seniors) to cultivate knowledge and skills that will enable them to develop research plans and/or proposals, as well as scholarship and fellowship applications.

This scholarship has the following objectives:

- Provide financial support to underserved and underrepresented students who demonstrate a desire to pursue STEM-based degrees of relevance to NASA, inclusive of commercial space and research conducted on the International Space Station (ISS).
- Promote STEM-related research at the undergraduate level.
- Cultivate skills to develop research proposals and competitive scholarship, fellowship, and internship applications.
- Connect underserved and underrepresented students to faculty, NC Space Grant alumni, and peers conducting research.



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- Foster an understanding of <u>NASA Mission Directorates</u> and introduce students to the <u>NASA</u> <u>internship process</u>.
- Expose students to STEM-based careers at NASA, research organizations, and/or commercial space.
- Bridge students to <u>NC Space Grant's higher education scholarships and fellowships</u>.

Although it is not required, the intended next step for scholarship recipients would be to apply for the NC Space Grant <u>Undergraduate Research Scholarship</u> program or the <u>Graduate Research</u> <u>Fellowship</u> program.

Award Details

- \$5,000 per student.
- Up to 12 scholarships may be awarded contingent upon receipt of federal funds and quality of proposals.
- Period of performance is November 1, 2022 May 15, 2023.

Eligibility Requirements

- This is a competitive scholarship program for undergraduate students (sophomores, juniors, and seniors) who attend a four-year Minority Serving Institutions (MSI) or a Historically Black College or University (HBCU) in the State of North Carolina identified by <u>NASA's</u> <u>Minority Serving Institutions Exchange</u>. A list of eligible college and universities is provided below.
- The student must be a U.S. citizen. Permanent residents (i.e., green card holders) are not eligible to receive a NASA award.
- The student must be enrolled as a full-time sophomore, junior, or senior (minimum 12 credit hours) at an accredited Minority Serving Institution (MSI) or Historically Black College or University (HBCU) in the State of North Carolina identified by <u>NASA's Minority Serving</u> <u>Institutions Exchange</u>.
 - Eligible universities/colleges: Bennett College, Chowan University, Elizabeth City State University, Fayetteville State University, Johnson C. Smith University, Livingstone College, North Carolina Agricultural & Technical State University, North Carolina Central University, North Carolina Wesleyan College, Saint Augustine's University, Shaw University, the University of North Carolina at



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Pembroke, and Winston-Salem State University. *If you are unclear as to whether your university/college is eligible, please send an email to the contact listed below.*

- Students must remain enrolled with full-time status throughout the duration of the award period. NC Space Grant <u>must be informed of changes to enrollment status</u>.
- The student must be pursuing a bachelor's degree in a STEM discipline of interest to NASA, commercial space, and/or in the ISS (inclusive of astronaut health). Links to <u>NASA</u> <u>Mission Directorates</u>:
 - <u>Aeronautics Research</u>
 - Human Exploration and Operations
 - <u>Science</u>
 - <u>Space Technology</u>
- The student must have completed at least one year of study in a STEM field (e.g., astronomy, biology, chemistry, computer science/information science, Earth science, engineering, mathematics, physics, etc.) at the time of application (i.e., sophomore, junior, or senior). Freshmen are not eligible for this award.
 - Students who have transferred from an accredited community college are eligible to apply if all other eligibility requirements are met.
- The student must have a grade point average of at least 2.8 on a 4.0 scale.
- Students enrolled in an accredited Dual Engineering Degree program are eligible to apply.
- Allied Health Science majors are NOT eligible for this program at this time.
- Students may receive up to two (2) MSI STEM Bridge Scholarships over the course of their studies.

How to Apply (Online Application System)

Interested students must complete an online application (see link below). *Please read all program guidelines including applicant eligibility and reporting requirements before submitting your application.* The application must be submitted online and all information must be complete or the application will not be reviewed.

- Applications are due by **6:00pm EST**, **Monday**, **October 17**, **2022**. <u>Late applications will</u> <u>not be accepted for any reason</u>.
- Awards will be announced on/around, Monday, October 24, 2022.
- Respond to a few short (400 words) essay questions (provided below).



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- Upload a prior academic year transcript with GPA or equivalent.
- Have a faculty member or academic advisor at the institution where you are a student submit a Letter of Recommendation to the application system no later than 6 p.m. EDT, Wednesday, Oct. 19, 2022. The faculty member or academic advisor must submit the letter to the system themselves.

LINK TO APPLICATION SYSTEM

There are informational data fields required for the application, so please allow ample time to complete the online application.

The following essay questions are to be answered as part of the online application: (Word limits - 400 per question)

- What STEM studies/classes are you pursuing? How/why did you decide to pursue it?
- If you could research anything as a student, what would you like to explore and why?
- How are your interest related to NASA (inclusive of commercial space or research being done on the ISS)? (Tip: Check out the NASA Mission Directorate links.)
- What do you hope to learn as part of this scholarship (make sure to review Objectives) to prepare you or inspire you along your academic or career pathways?
- Describe any STEM-related extra-curricular activities in which you have participated (e.g., clubs, teams, camps, mentoring, jobs, internships, etc.) that have prepared you to fulfill your scholarship requirements.

Student applications will be evaluated based on academic merit, prior success in STEM coursework (GPA), extracurricular activities (e.g., teams, clubs, and relevant work experience), faculty recommendation, interest in STEM research, and an interest in NASA-related research, inclusive of commercial space and/or research on the ISS.

Application Evaluation Criteria

MSI STEM Bridge - 100 points

- Academic merit (GPA & Related STEM coursework) 10 pts
- Essay 1: What STEM studies/classes are you pursuing? How/why did you decide to pursue it? 10 pts
- Essay 2: If you could research anything as a student, what would you like to explore and why 10 pts
- Essay 3: How are your interest related to NASA (inclusive of commercial space or research being done on the ISS)? (Tip: Check out the NASA Mission Directorate links.) -



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15 pts

- Essay 4: What do you hope to learn as part of this scholarship (make sure to review Objectives) to prepare you or inspire you along your academic or career pathways? 15pts
- Essay 5: Describe any STEM-related extra-curricular activities in which you have participated (e.g., clubs, teams, camps, mentoring, jobs, internships, etc.) that have prepared you to fulfill your scholarship requirements. 10 pts
- Essay 6: How will your research prepare you along your academic pathway and/or future career? 15 pts
- Letter of recommendation 15 pts

Awardee Requirements

Awardees are required to complete the following in order to receive funding:

Fall Semester 2022: 3 Requirements

- 1. Awardees are required to attend a fall semester webinar that will feature a NASA expert and NC Space Grant staff member. During the information session awardees will hear about opportunities for NC Space Grant scholarships, fellowships and internships.
- 2. Awardees are required to apply to <u>NASA's Fellowships and Internships program</u> in order to experience the application process. <u>Students shall send a screenshot of their finalized</u> internship application via email to the NC Space Grant contact listed below by December 15, <u>2022 as verification</u>. Please note that should an internship be awarded to the student, it is not a binding commitment. If awarded, the student must discuss funding for the experience with NC Space Grant. <u>Note: Receipt of scholarship funds is not contingent upon successfully obtaining a NASA internship, since offers are dependent on the NASA selection process</u>. <u>Rather, NC Space Grant values the experience of applying for NASA Internships you never know unless you try!</u>
- Conduct online research about any of the four <u>NASA Mission Directorates</u>. <u>The student shall</u> notify the NC Space Grant contact listed about their research topic via email no later than <u>December 15, 2022.</u>
 - <u>Aeronautics Research</u>
 - <u>Human Exploration and Operations</u>
 - <u>Science</u>
 - <u>Space Technology</u>



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After awardees complete fall semester requirements, the first installment of scholarship award (\$2,500) will be released (anticipated date: late December 2022).

Spring Semester 2023: 3 Requirements

- Interview a current faculty member at your university who teaches and conducts research in an area of interest to you. This research should be of interest to NASA (but not necessarily already being conducted by NASA). Awardees should consider identifying a mentor for future research – a mentor is a person who can support your interests, guide you, listen to your concerns, and give you advice. <u>Students shall send an email with the name and title of</u> the person who they interviewed to the NC Space Grant contact listed below by February 28, <u>2023 as verification.</u> (Tip - Take notes since we'll ask you about it in your final report!)
- 2. Attend an early spring semester webinar to learn about developing a research proposal.
- *3.* Submit a final report via email to the NC Space Grant contact listed below. The report should reflect what the student has learned from the scholarship, and lay out a plan for future research. The report should be no more than 5 pages. **The final paper is due no later than May 31, 2023.**

Although it is not required, MSI STEM Bridge Scholars are *strongly encouraged* to use what they have learned from this scholarship to apply for the NC Space Grant <u>Undergraduate</u> <u>Research Scholarship</u>, <u>Graduate Research Fellowship</u>, or other scholarship programs. <u>Please note</u> that other NC Space Grant scholarships are due mid-March, so the earlier you get a head start on your scholarship requirements, the more competitive your application may be!

OPTIONAL (But strongly recommended!): Attend the NC Space Symposium scheduled for Friday, Apr. 21, 2023. There is no registration cost for MSI STEM Bridge Scholars, <u>however</u>, <u>scholars are expected to cover their own travel costs (e.g., transportation, hotel, etc.) through</u> <u>their MSI STEM Bridge Scholarship funds or other funds (e.g., department funds).</u> Scholars who wish to attend but are experiencing hardships are invited to bring this to the attention of the NC Space Grant contact listed at the bottom in advance, for confidential individual discussion as needed.

After your final paper is submitted and approved by NC Space Grant, the second half of the scholarship award (\$2,500) will be released (anticipated date: late May 2023).

Additional Requirements



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- Upon selection, awardees must submit an acceptance form and provide a photo and biographical information.
- Students must set up an account in Payment Works, the online system through which payments will be processed. The student must update any changes of address, banking information, etc. over the course of the award in Payment Works.
- The student must respond to academic and employment surveys requested by NC Space Grant and NASA.
- Awardees may be asked to share their experience in public forums, on social media (#ncspacegrant), in an NC Space Grant <u>news</u> story, in professional meetings, etc. Awardees will be asked to collaborate on communications products with NC Space Grant both during and after the scholarship period.

Contact

For more information, contact: Sandy Canfield Assistant Director NC Space Grant <u>srcanfie@ncsu.edu</u> 919-515-5943