

The Minority Serving Institutions (MSI) Science, Technology, Engineering and Math (STEM) Pathways Scholarship Program

Background

The National Space Grant College and Fellowship Program (Space Grant) champions diversity, equity, inclusion, justice and accessibility (<u>DEIJA</u>) 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

NC Space Grant's <u>MSI STEM Pathways Scholarship</u> program supports and encourages students along their early academic pathway (community college and non-senior undergraduate students) in NASA-related STEM disciplines.

This scholarship has the following objectives:

- Provide financial support to underserved and underrepresented students who demonstrate a desire to pursue a STEM-focused academic pathway that has <u>NASA Mission Directorate</u> (see *Eligibility Requirements* below) applications, inclusive of commercial space and/or the International Space Station (ISS).
- Expose students to STEM-related research taking place at community colleges and undergraduate colleges and universities.
- Connect underserved and underrepresented students to NC Space Grant-supported students, faculty and alumni.
- Foster an understanding of <u>NASA Mission Directorate</u> research and introduce students to the <u>NASA internship process</u>.
- Expose students to STEM-based careers at NASA, research organizations and/or commercial space.
- Serve as a pathway to other <u>NC Space Grant higher education scholarships and fellowships.</u>



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Although it is not required, the intended next step for scholarship recipients would be to apply for the <u>MSI STEM Bridge Scholarship</u> program.

Award Details

- \$3,000 scholarship per student.
- Up to 10 scholarships may be awarded.
- Period of performance is **Nov. 1**, 2022 May 15, 2023.
- Awards are contingent upon receipt of NASA funding and quality of submitted proposals.

Eligibility Requirements

- This is a competitive scholarship program for community college and non-senior undergraduate students (freshmen, sophomores and juniors only) at two- and four-year institutions, who attend a Minority Serving Institution (MSI), or Historically Black College or University (HBCU) identified in <u>NASA's Minority Serving Institutions Exchange</u> in the State of North Carolina. A list of eligible community colleges and universities is provided under "Eligibility Requirements" below.
- The student must be a U.S. citizen. Permanent residents (i.e., green card holders) are not eligible to receive this NASA award.
- The student must be enrolled as a full-time community college student or freshman, sophomore or junior with a minimum of 12 credit hours at an accredited Minority Serving Institution (MSI) or Historically Black College or University (HBCU) targeted by NASA in the State of North Carolina.
 - Eligible universities and colleges: Bennett College, Bladen Community College, Chowan University, Edgecombe Community College, Elizabeth City State University, Fayetteville State University, Halifax Community College, Johnson C. Smith University, Livingstone College, North Carolina Agricultural & Technical State University, North Carolina Central University, North Carolina Wesleyan College, Robeson Community College, Saint Augustine's University, Sampson Community College, Shaw University, the University of North Carolina at Pembroke, and Winston-Salem State University.
 - Students must remain enrolled with a full-time status throughout the duration of the award period. NC Space Grant <u>must be</u> informed of changes to enrollment status.

If you are unclear as to whether your university/college is eligible, please send an email to the contact listed below.



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- The student must be engaged in academic coursework in a STEM discipline at the time of application. Examples: astronomy, biology, chemistry, computer science/information science, Earth science, engineering, mathematics, physics, etc.
- The student must express interest in NASA, commercial space and/or research taking place on the ISS, inclusive of astronaut health. The NASA Mission Directorates are as follows:
 - Aeronautics Research
 - <u>Human Exploration and Operations</u>
 - <u>Science</u>
 - <u>Space Technology</u>
- 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 (e.g., health lab tech) are not eligible for this program at this time. Art majors are not eligible for this program at this time.
- Students may receive only one (1) MSI STEM Pathways Scholarship over the course of their studies. Although it is not required, the intended next step for scholarship recipients would be to apply for the MSI STEM Bridge Scholarship program.

How to Apply (Online Application System)

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

- Apply by 6 p.m. EDT, Monday, Oct. 17, 2022. Late applications will not be accepted for any reason.
- Awards will be announced on/around, Monday, Oct. 24, 2022.
- Respond to a few questions with short, 300-word essays (provided below).
- Upload a prior academic year transcript with GPA or equivalent. Freshmen or first-year community college students may submit their senior year high school transcript.
- A faculty member or academic advisor at the institution where the student is currently enrolled must 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. Freshmen or first-year community college students are allowed to have a high school educator, previous employer, etc. submit a letter.



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LINK TO APPLICATION SYSTEM

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

The following essay questions are to be answered as part of the online application: (Word limits - 300 per question)

- What STEM-related classes or degree would you like to study? What interests you about it?
- We think NASA is pretty awesome. What makes you interested in NASA, commercial space or the ISS?
- How will this scholarship impact your academic or career pathways (beyond financial support)?
- Describe any STEM-related extra-curricular activities in which you have participated (e.g., clubs, teams, camps, mentoring, jobs, internships, etc.) that may have prepared you to fulfill your scholarship requirements.

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

Application Evaluation Criteria

MSI STEM Pathways - 100 points

- Academic merit (GPA & Related STEM coursework) 15 pts
- Essay 1: What STEM-related classes or degree would you like to study? What interests you about it? 15 pts
- Essay 2: We think NASA is pretty awesome. What makes you interested in NASA, commercial space or the ISS? 20 pts
- Essay 3: How will this scholarship impact your academic or career pathways (beyond financial support)? 20 pts
- Essay 4: Describe any STEM-related extra-curricular activities in which you have participated (e.g., clubs, teams, camps, mentoring, jobs, internships, etc.) that may have prepared you to fulfill your scholarship requirements. 15 pts
- Letter of recommendation 15 pts

Awardee Requirements



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

Fall Semester 2022: 2 Requirements

- 1. Awardees are required to attend a fall semester webinar featuring a NASA expert and an NC Space Grant staff member. During the information session awardees will hear about opportunities for future 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 applying for an internship with NASA. <u>Students shall send a screenshot of their submitted application via email to the NC Space Grant contact listen below by December 15, 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 should discuss funding for the experience with NC Space Grant. Note: Receipt of MSI STEM Pathways Scholarship funds is not contingent upon successfully obtaining a NASA internship, since offers are dependent on the NASA selection process. Rather, NC Space Grant values the experience of applying for NASA Internships you never know unless you try!

After awardees complete both fall semester requirements, the first installment of \$1,500 of the scholarship award will be released. The anticipated date is late December 2022.

Spring Semester 2023: 3 Requirements

- Conduct online research about current or planned space missions (e.g., Artemis) or research being conducted within any one of the four NASA Mission Directorates. <u>Students shall send</u> <u>an email to the NC Space Grant contact listed below with their research topic (Mission</u> <u>Directorate) by March 1, 2023 as verification.</u> NASA aligns its research and other activities into these four Directorates. The NASA Mission Directorates are as follows:
 - <u>Aeronautics Research</u>
 - <u>Human Exploration and Operations</u>
 - <u>Science</u>
 - <u>Space Technology</u>
- 2. Interview a current faculty member/instructor at the awardee's college or university who teaches or conducts STEM research in an area of interest to the awardee. 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 and many other things. Students shall send an email to the NC Space Grant contact listed below with the name and title of the person who they interviewed by April 30, 2023 as verification. (Tip Take notes since we'll ask you about it in your final report!)



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3. Awardees are required to submit a report (approximately three pages) summarizing what they learned, a) during the NASA expert webinar, b) by researching their chosen NASA Mission Directorates, and c) from the faculty interview. <u>The report is due to the NC Space Grant</u> contact listed below via email no later than May 31, 2023.

After the student submits the research paper and NC Space Grant approves it, the second installment of \$1,500 of the scholarship award will be released. The anticipated date is late May 2023.

OPTIONAL (but strongly recommended!): Attend the NC Space Symposium scheduled for Friday, Apr. 21, 2023. There is no registration cost for MSI STEM Pathways Scholars, <u>however</u>, <u>scholars are expected to cover their own travel costs (e.g., transportation, hotel, etc.) through</u> <u>their 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.

Other Requirements

- 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 <u>srcanfie@ncsu.edu</u> 919-515-5943