



2024-2025 Graduate Research Fellowship Program

Objective

The objective of the Graduate Research Fellowship opportunity is to encourage talented individuals to pursue research and careers in STEM fields that support NASA's Mission Directorates.

Overview

The Alabama Space Grant Consortium (ASGC), as a participant in the National Space Grant College and Fellowship Program (NSGCFP), provides support for graduate students to supplement and enhance basic research. The program requires that students participate in an active, defined research activity in science, technology, engineering and mathematics (STEM) fields that has 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 member, and may be conducted virtually, on the home campus accordance with university policies, and/or at an industrial or government facility. Selected Graduate Research Fellows will conduct research over the course of a 12-month period unless terminated prematurely by either the fellow or the Space Grant office. Unused funds must be returned to AL Space Grant on a pro-rated basis. Graduation, or leaving university for any reason, terminates the award. Proposed starting dates for new awards will generally be expected to coincide with normal semester, quarter, or other accepted academic term starting dates.

Award Level

AL Space Grant graduate fellowship awards are made initially for one 12-month period and may be renewed annually for a maximum total award of 36 months (3 years). The total Space Grant funds awarded per student will not exceed \$37,000 for 12 months. This award will include \$24,000 for student stipend and up to \$12,000 for tuition/insurance and \$1,000 student travel allowance. Fellows will be expected todevote full-time to graduate study and research during the tenure of the fellowship. Awards are contingent upon receipt of NASA funding and the quality of submitted proposals.

Renewal Applications

Graduate fellowships may be renewed for two additional years. Competitive proposal review is required for renewal of graduate fellowships for a maximum fellowship award of 36 months. Renewals are NOT automatic. Requests for renewal are to be submitted in the same format as new applicants fulfilling all requirements but should also include a brief statement outlining the progress and status of the research program or plan of study, documentation of accomplishments and any changes from the original proposed research. The starting date for renewals is on the anniversary of the most recent award.

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. AL Space Grant strongly encourages applications from graduate students at HBCUs and MSIs and/or from traditionally underserved and underrepresented communities.

The Graduate Research Fellowship applicant must be:

- A United States citizen.
- Currently enrolled, or planning to be enrolled in the **Fall of 2024**, 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 Alabama.
- Conducting a specific research project that has a NASA Mission Directorate, commercial space, or the ISS relevance.
- In good academic standing with a GPA of 3.0 (out of 4.0).

Deadlines

- Student applications due midnight, Monday, February 26, 2024
- Faculty Letter of Recommendation due midnight, Monday, March 4, 2024

Awards will be announced in late April/early May 2024, contingent upon receipt of NASA funds.

Application Instructions

Apply for the Alabama Space Grant Graduate Research Fellowship by clicking here: *https://www.uah.edu/asgc/applications/fellowship 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. 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 and availability of federal funds.

Students are requested to respond to these key components of the application:

- **Student Resume**: A brief resume of the applicant must be submitted in the online application. The student's resume should include a short summary of education, training and accomplishments both inside and outside the educational world.
- University Transcripts: Unofficial transcripts from all institutions and from the current institution with most recent grades 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, whether as an undergraduate or graduate student where you have received 10 or more credit hours. If the applicant does not have a .pdf conversion tool, links to free online .pdf converters are provided within the application. Official transcripts may be requested for verification.
- Faculty Recommendation Letter: Applicants are required to provide the name and contact information for one reference which should be the student's faculty advisor. The faculty advisor must provide a recommendation as to the acceptability of the student for the program, a clear statement of the advisor's willingness to supervise the student, and the nature of any past or present experience with the student. The letter should be addressed to the appropriate campus director. The online application system will contact your reference via email to request a letter of recommendation. For the applicant. References will be provided with a link to submit the recommendation. For the application to be complete, the letter of recommendation must be submitted by Monday, March 4, 2024. AL Space Grant suggests applicants contact the reference listed and inform them in advance they will receive an email requesting this information on their behalf from *notices@spacegrant.org*.

- **Proposal Title & Abstract**: Each proposal must have a title and the abstract, not to exceed 400 words, must describe the objectives of the proposed research program or plan of study and the methodology to be used.
- **Description of the Proposed Research Project**: Statements written by the student in consultation with their advisor should describe: 1. research goals; 2. key elements of the proposed research plan; 3. a description of the relevance or significance of the research, i.e., why the research is important to pursue; 4. relevance to NASA Mission Directorates, commercial space, or the ISS; and 5. an explanation of what new knowledge or skills the student will obtain that will serve as a springboard for future academic and/or career pursuits. Renewal applications must include a brief statement outlining the progress and status of the research program or plan of study, documentation of accomplishments and any changes from the original proposed research.
- **Budget**: A 12-month budget (not to exceed \$37,000) must be prepared by the student's Office of Sponsored Programs/Research Administration Office at their respective university and should include the following:
 - The \$24,000 student stipend for 12 months.
 - Expenditure plan for up to \$13,000 (\$12,000 to include tuition/insurance and \$1,000 for student travel no foreign travel is allowed).

An expense plan for the required extramural experience must not exceed the expenditure limits stated above. In a request for renewal, include in the budget plan the amount of any unused funds remaining from previous awards.

- NASA Extramural Experience: An extramural, work-study experience is required sometime during the fellowship year. The details are to be worked out with the faculty advisor and NASA lab facility where the student plans to participate in a research activity (can be conducted virtually). It is advisable that a NASA contact be found prior to submission of the fellowship proposal. Names and locations of NASA field centers are:
 - Ames Research Center CA
 - Armstrong Flight Research Center CA
 - Glenn Research Center OH
 - Goddard Space Flight Center MD
 - o Jet Propulsion Laboratory CA
 - Johnson Space Center TX
 - Kennedy Space Center FL
 - Langley Research Center VA
 - o Marshall Space Flight Center AL
 - Stennis Space Center MS
- Education Outreach: Fellows are expected to be involved in AL Space Grant outreach activities. Proposed activities may take advantage of local opportunities and should involve the student's transmitting their knowledge and enthusiasm of science, math or technology to children or general audiences. These activities will differ from campus to campus and a specific assignment will be made after consultation with the AL Space Grant campusdirector.
- Schedule of Target Dates: The starting and completion dates for the proposed research program or plan of study, including the expected date for completion of the formal degree program, should be identified realistically. Any time expected to be spent at a NASA facility, including the required extramural experience, should be taken into consideration in establishing the target dates. The fellowship is to last for a one-year timeframe.

- **Goals Statement:** Students should describe their short- and long-term career goals/future education and career plans (500 words or less).
- **NASA Alignment**: Proposed research should align with NASA's Mission Directorates. Describe the relevance to NASA Mission Directorates, commercial space, or the ISS (500 words or less).
 - NASA Mission Directorates:
 - Aeronautics Research
 - Human Exploration and Operations
 - Science
 - Space Technology

Proposal Review and Evaluation Criteria

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

- Research Interests and Goals (35%)
- Research Plans (35%)
- Alignment of Research to NASA Mission Directorates (10%)
- Anticipated Impact to Academic and Career Pathways (10%)
- Letter of Recommendation (10%)

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

Awardee Requirements

The Graduate Research Fellow must meet the following requirements:

- Provide a head shot photo and acceptance form upon selection.
- Submit a final research report to the AL Space Grant.
- Attend AL Space Grant Awards Day in the Fall of 2024.
- Share their research experiences in public forums or educational settings. Presentations that encourage interest in aerospace careers and research to high school students are of particular interest to the AL Space Grant.
- Work with the AL 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 AL Space Grant website.
- Make activity and results public via social media during and after their research using accessible social media accounts and consistent hashtags.
- Work with the AL Space Grant Outreach Coordinator to conduct a specific outreach curriculum activity at a local K-12 school. To include monthly check-in virtual meetings and reporting of outreach information.
- Credit AL Space Grant for sponsoring the activity in all printed materials (e.g. use the AL Space grant logo on posters, credit and tag on social media, etc.).
- Inform the Consortium of changes of address.
- Respond to academic and employment follow-up surveys administered by AL Space Grant as required by NASA.

Disposition of Unused Funds

If a student is unable to complete their academic program in the year of the award, a prorated share of fellowship funds must be returned to the AL Space Grant and their fellowship will be terminated. Fellowship funds are not transferable.

Contact

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