Undergraduate Research (UGR)

Applications Open: November 15, 2019
Application Deadline: February 5, 2020
Award Announcements: March 27, 2020

Awards:

• 2020 Summer Research: Up to $4000*
• 2020-2021 Academic-Year Research: Up to $4000*

*Based on availability of funds.

Purpose: Research awards will be provided to qualified undergraduate students to create and implement a small research study of their own design that is directly related to their interests and career objectives in space science, aerospace, or space-related studies. The student may work alone or with a faculty or research staff advisor; however, the conceptualization and design of the project should be their own. Awards will emphasize effective student research and mentoring arrangements. Students from small colleges and universities, and from departments with newly developing space research infrastructure, are especially encouraged to apply. WSGC will facilitate mentoring arrangements if necessary.

To Apply:

• Register on the WSGC website (https://spacegrant.carthage.edu/forms/account/login). Applicants will be prompted to update personal information annually.
• Sign in and submit the Grant Application Form (applicants may apply to multiple funding programs) and supporting documents.
• Provide two letter(s) of recommendation in PDF format through the online application process or confidentially via email to the WSGC Program Office with subject line UGR20_LOR.

Application Requirements: Applicants who meet the following requirements can apply for this scholarship by registering and applying online at spacegrant.carthage.edu/about/login:

• U.S. citizen
• WI resident during academic year
• Enrolled full-time in, admitted to, or applied to any undergraduate program at a WSGC college or university
• Enrolled in a STEM program of study and demonstrating an interest in aerospace or supporting NASA’s mission
• Minimum 3.0 GPA (*Proposals that include a GPA of less than 3.0 will be evaluated on a case-by-case basis*)
• Completed application online (see Supporting Materials Required with Application below)

*NOTE: Students also applying for the Undergraduate Scholarship Program should submit a statement distinguishing the fellowship from the scholarship application. WSGC limits the number of individuals eligible to receive both awards.*

**Current & Past Award Recipients**

The Consortium invites applications for Undergraduate Research for the 2019-2020 academic year. For consideration, application forms must be complete, and be accompanied by supporting documentation. The Consortium especially encourages applications from members of minority groups, women, and persons with disabilities, and from those pursuing interdisciplinary aerospace studies in, but not limited to, engineering, the sciences, architecture, law, business, nursing and medicine. Award winners will be chosen based on academic performance, aerospace-related promise, and the demonstrated interest in pursuing a career in STEM/aerospace. For consideration, the application form must be complete and be accompanied by supporting documentation.

**Supporting Materials Required with Application:**

1. Copy of applicant’s high school transcript (*unofficial is acceptable/incoming Freshman and Sophomores only*)
2. Copy of most recent college transcript (*unofficial is acceptable/not required for incoming Freshman*)
3. Two (2) Letters of Recommendation: Letter(s) of recommendation may be submitted with the applicant’s online application. Confidential letter(s) of recommendation may be emailed to spacegrant@carthage.edu. Subject: UGR20_LOR.
   a. One from the applicant’s research advisor.
   b. One from another faculty member or teacher, employer, or aerospace professional of choice.
4. A maximum 10-page proposal containing the following categories and labeled clearly (See Tools & Tips for more information on how to create professional communications):
   a. Introduction/Summary
      i. Summarize the project in one page or less. It is best to begin the proposal by writing the Introduction; this gives a good feeling for the size and scope of the project. Finally, when finished writing the other sections, return and rewrite this section to accurately summarize the proposed study.
   b. Background
      i. In a few paragraphs, summarize what the applicant knows about current and previous research on the topic wanted study (including work being done on this topic where the applicant goes to school). Provide references of work the applicant is familiar with or that might be helpful the work.
   c. Proposed Activities
      i. This is the most important section of the proposal, where the applicant answers the “how” and the “why” described above. Outline in some detail:
         1. **What** topic applicant wants to study.
         2. **Why** applicant feels this is a good (important) topic to study.
         3. **How** will the applicant go about doing the research (methods, techniques, etc.), and how it aligns, at least in a broad sense, with NASA Directorate and Center goals.
         4. **What** the applicant expects the results to be.
         5. **How** the results/products might be used.
            a. Try to be complete; an outline of each step in the research program is a good way to start this section; then just fill in the words to describe each step. (*This step may take several pages*)
   d. Resource Requirement
i. Explain how the applicant will use any materials, equipment, laboratory time, etc. in the research work. When creating the budget, it is important to note that the WSGC is reluctant to fund the purchase or rental of high-cost materials, equipment or facilities. Our NASA Space Grant Charter requires that in the interest of cooperative support for student educational opportunity, the college or university provide facilities and materials. By asking the school to share these costs, WSGC funds are available to more students. Applicants should make this clear to the department they are working with and obtain approval from the department advisor and/or chairperson. Call the WSGC Program Office for help in this matter; the office is very willing to discuss this issue with the applicant’s department.

e. Time Line
   i. A series of dates is required:
      1. When the project starts.
      2. When the project finishes (Projects must be completed by May 2021)
      3. Any dates in between when specific/important steps of the work will be started or completed. This information mainly helps in planning the project.
      4. The WSGC Annual Space Conference in August 2021 @ MSOE in Milwaukee, WI
   ii. Awardees will be asked to present a discussion of their research at the WSGC Annual Wisconsin Space Conference following the completion of the research.
   iii. Awardees will be expected to complete the research and submit a Final Report by the end of the time agreed upon.

f. Budget
   i. Applicants may want to work with a department advisor to help create the budget. Applicants can also call the WSGC Program Office for advice. WSGC will provide funds for tuition, labor and for the travel if it is considered important to the work or beneficial to the applicant’s research experience.
   ii. Labor is meant for the applicant, not for persons who are already salaried. We request that the budget break down the labor hours by topic (if appropriate), so that everyone has a better understanding of the procedures in the study. Please make the labor rate consistent with skilled student hourly workers on campus. Please be aware that awardees may need to pay taxes on any labor expenses incurred.
   iii. The budget can include travel funds for the applicant:
      1. to meet and work with the research mentor.
      2. for other work-related travel (conference, field experiment, NASA Center).
      3. for travel to the WSGC Annual Space Conference (Average individual student cost is $35-40 Registration Fee; $35-$50/night student lodging at local campus or $100/hotel; $40 food/day; and $0.58/mile travel).
   iv. Explain (justify) in Section 3 (Proposed Activities) why any work-related travel would be beneficial for the applicant’s study. Finally, as stated above, WSGC is reluctant to fund the purchase or rental of high-cost materials, equipment or facilities. The WSGC Program Office can help with questions about the proposal process. If an applicant requests any support beyond tuition, labor, and travel, a strong justification must be submitted.
Salaries and Fringe budgets should include the following details: name/position, number of hours, hourly rate, and fringe calculation rates.

WSGC financially supports travel to and from the Wisconsin Space Conference only if expenses are included in this budget proposal. Travel will be considered if it is fundamentally important to the project. Out of country travel cannot be funded. Please delineate between air, ground, lodging, and meal expenses. Travel details should include purpose, location and duration.

WSGC will not fund overhead.

Required Letters of Recommendation: Letter(s) of recommendation may also be emailed to spacegrant@carthage.edu. Subject: UGR20_LOR.

1. Two (2) Letters of Recommendation:
   a. One from a faculty member who advises you on your research related to this scholarship (or academic advisor or high school advisor for incoming freshmen).
   b. One from another faculty member, employer, or aerospace professional of your choice.

Award Acceptance Components: As part of the award acceptance, the awardee will be asked to attend the Annual Wisconsin Space Conference in August and submit the following documents on the WSGC website under Program Applications/Your Applications:

- Award Acceptance Letter
- W9 (Carthage College award recipients submit a W4 and I9)
- Media Release Form
- One-Paragraph Biography
- Professional Photo
- Office of Education Survey must be completed by December 15, 2021
- Interim Report
- 2-3 Project Photos Featuring Awardee w/Project
- Present Project at the Annual Wisconsin Space Conference in August
- Submit a Proceeding Paper/Final Report by Sept. 15th to the Proceedings of the Wisconsin Space Journal

Please direct questions about the Undergraduate Research Program to:

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Wisconsin Space Grant Consortium
Carthage College
2001 Alford Park Drive, Kenosha WI 53140
Phone: 262-551-6054
E-mail: spacegrant@carthage.edu
This funding opportunity is made available for the pursuit of space-related research and/or activities through the National Space Grant College and Fellowship Program: NASA Training Grant #NNX15AJ12H. Catalog of Federal Domestic Assistance (CFDA) number for this award is 43.008.

All awards are fully competitive awards of opportunity in which applications are reviewed by the WSGC Technical Advisory Panel and other experts as needed. Awards are made by the Assistant Director based on recommendations from the Associate Director.