



Student and Faculty Guidelines

1. Program Purpose

The purpose of this program is to provide prestigious, competitive awards to outstanding undergraduate engineers who wish to pursue research with environmental impacts under the mentorship of a faculty member. Students are required to submit a research plan describing a specific research project to be completed under the direction of a faculty mentor. **Research plans must be written by the student**, but students should discuss the plan with their faculty mentor before submitting. Applications will be evaluated by a panel of UVM College of Engineering and Mathematical Sciences faculty, and the top ranked applications are selected for funding. Awardees carry out the research over a summer, create and present a poster describing their work and their results, and submit a video diary or photo story describing their outcomes. In many instances, results may be suitable for presentation at regional or national conferences and/or publication.

2. Eligibility

The *Richard Barrett Scholars Program* is open to all full-time UVM Engineering undergraduates. (Graduating seniors are NOT eligible to apply). Any UVM Engineering faculty member may act as a student's mentor or co-mentor. The research conducted under the scholars program must be in the general area of **engineering related to the environment** with a focus on interdisciplinary experiences. The Barrett scholars internships are intended to facilitate undergraduate research experiences that are over and above research normally conducted in the context of courses taken for academic credit. Mentored independent student research projects that are not associated with a for-credit course or with for-credit summer research, are thus eligible to apply as Barrett Scholars. If the research is on the same topic of a student's honors thesis, the proposal must clearly state how this work is distinguished from the honors thesis work.

3. Application Process

Each student applicant is required to submit the following:

- 1) A Richard Barrett Scholars *Cover Page*
- 2) A *Project Description* describing proposed research
 - a) The Project Description must be written by the student, not exceed 1 page (12 pt font), and provide:
 - i) a short description of the research project to be performed,
 - ii) the significance of the proposed research, and
 - iii) the student's interest and preparation for the project (e.g. specialized skills or knowledge).
 - b) A *budget* listing specific equipment, items, travel, etc., necessary to complete the project together with estimated costs.
- 3) A *resume* for the student proposer, not more than **1 page** including the student's current GPA as well as a list of specific courses relevant to conducting research in the proposed area. It is the responsibility of the student to demonstrate that they have the qualifications to successfully carry out the research.
- 4) A *short curriculum vitae* for the faculty mentor, not more than **2 pages (in NSF style)**, indicating the faculty member's expertise in the research area and his/her experience supervising students.

4. Application Submission

All of the above documents must be submitted via Handshake at <https://uvm.joinhandshake.com/jobs/4160018>.

- Students should save their application materials as one **.pdf or .doc file** titled “RBF-FirstLastName”
- Applications become available on **Wednesday, January 6, 2021**. Submissions are due by **5:00PM** on **Friday, March 5, 2021**.

5. Timeline

I. Applications become available beginning **Wednesday, January 6, 2021**. Applications must be submitted via Handshake at <https://uvm.joinhandshake.com/jobs/4160018>.

II. Students must submit their application electronically by 5:00PM on **Friday, March 5, 2021**.

III. Awards will be announced by **Friday, April 2, 2021**.

IV. Budget accounts will be available for use by student researchers by the end of **April 2021**.

V. All project funds must be used by **September 30, 2021**. Accounts will be closed and funds will not be accessible or reimbursable thereafter except in unusual cases with explicit prior approval.

VI. A poster of the research is due by **September 30, 2021**. Although there is no specified format, it must contain an abstract that is accessible to an audience of non-specialists.

VII. Students will have the opportunity to present their work several times during the summer and fall on an informal basis.

6. Award & Budget Information

I. We estimate that between 5-10 awards will be given for the Summer 2021 program.

II. Each award will provide summer research funding in the amount of \$6,500 as a student stipend and up to \$1,500 for material and operation costs.

III. The operating budget request may not exceed \$1,500 (over and above the student stipend). Additional supplemental funding may not be requested at a later date. If the proposed research entails expenses and/or equipment that cannot be acquired within the \$1,500 limit, the proposer must specify the source of the other funds/equipment for the project to be deemed fundable.

IV. Equipment or computers that should normally be part of a research facility where the project is to be carried out may not be requested in the budget (although rental fees might be appropriate). All equipment purchased as part of the project accrues to the faculty supervisor's home department upon completion of the project.

V. The faculty mentor, by signing the cover page, agrees to assume fiduciary responsibility for the project budget. Budget overages will accrue to the mentor's home department.

VI. Student travel and living expenses to sites and/or conferences may be funded, including conferences where the student may present the research results. Support for faculty mentors (including travel, even if with the student) is not allowable. No cash advances for travel are permitted. Students must follow the University's Policies and Procedures for Travel and should contact the General Accounting Office at 656-1477 or email general.accounting@uvm.edu for more information prior to making any travel plans.

VII. All operating expenses must be used to support the specific project funded - monies cannot be applied to or interchanged with other (departmental) expenses. Operating funds cannot be accumulated or rolled-over in anticipation of multiple-year funding.

7. Evaluation

Applications will be evaluated based on the quality of the proposed research, the relevance of research to Environmental Engineering in general, the value of proposed research experience for the student, and the record of

the proposed faculty mentor with regard to his/her ability and availability to provide sound mentoring in the proposed research area. Consideration will be given to the content, grammatical correctness, and lucidity of the narrative in student writing. Evaluators will also consider whether the student has made clear his/her qualifications to carry out the research, and whether the research can be successfully completed within the proposed budgetary, time and facilities constraints. Each application must clearly document the student's original contribution to a research endeavor, especially if the project is part of a larger (faculty) research project. Applicants collaborating on a larger project must submit separate applications identifying their individual roles and expected contributions.

8. Evaluation Process

Each proposal will be evaluated by a review panel of CEMS faculty. The review panel will make recommendations to the program director who shall make the final decision on the awards. Once the awards have been made, a letter will be sent to students and faculty mentors detailing how the awards will be implemented. Students must work with their faculty mentors to access the operating funds.

Questions?

Contact Jeff Marshall, CEMS Associate Dean for Research by email: jmarshall@uvm.edu