

Student and Faculty Guidelines

1. Program Purpose

The purpose of this program is to provide prestigious, competitive summer internships to outstanding undergraduate engineers who wish to pursue research with environmental impacts under the mentorship of a faculty member. Students must submit a research plan describing a specific research project to be completed under the direction of a faculty mentor or a company sponsor. **The student must write research plans**, but students must discuss the plan with their faculty mentor or company contact person before submitting it. Applications will be evaluated by a panel of UVM College of Engineering and Mathematical Sciences faculty, and the top-ranked applications will be selected for funding. Awardees carry out the research over the summer and create a poster and a PowerPoint presentation describing their work and results. In many instances, results may be suitable for presentation at regional or national conferences and/or publications.

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 scholar's 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 generally conducted in the context of courses taken for academic credit. Mentored independent student research projects not associated with a for-credit course or for-credit summer research are thus eligible to apply as Barrett Scholars. If the research is on the same topic as 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 the proposed research
 - a) The student must write the Project Description, 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 how it promotes environmental stewardship and
 - iii) the student's interest and preparation for the project (e.g., specialized skills or knowledge).
- 3) A **budget** listing specific equipment, items, travel, etc., necessary to complete the project together with estimated costs.

- 4) A **resume** for the student proposer, not more than **1 page**, including the student's current GPA and a list of specific courses relevant to conducting research in the proposed area. The student must demonstrate that they have the qualifications to carry out the research successfully.

4. Application Submission

All of the above documents must be submitted via Handshake at <https://uvm.joinhandshake.com/stu/jobs/8598104>

- Students should save their application materials as one **.pdf or .docx file** titled “RBF-FirstLastName.”
- Applications become available on **Friday, January 13, 2024**. Submissions are due by **5:00 PM on Friday, March 1, 2024**.

5. Timeline

- I. Applications become available beginning **Friday, January 13, 2024**. Applications must be submitted via Handshake at <https://uvm.joinhandshake.com/stu/jobs/8598104>
- II. Students must submit their application electronically by 5:00 PM on **Friday, March 1st, 2024**.
- III. Awards will be announced by **Friday, April 5th, 2024**.
- IV. . Budget accounts will be available to student researchers by the end of **May 2024**.
- V. All project funds must be used by **September 1, 2024**. Accounts will be closed, and funds will not be accessible or reimbursable after that except in unusual cases with explicit prior approval.
- VI. A research poster is due by **September 1, 2024**. Although there is no specified format, it must contain an abstract accessible to an audience of non-specialists. More information on the format of this event will be provided as we get closer.
- 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 6 and 8 internship awards will be awarded for the Summer 2024 program.
- II. Each internship award will provide a summer research stipend of \$7,500 and up to \$1,000 for material and operation costs.
- III. The operating budget request may not exceed \$1,000 (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 \$1,000 limit, the proposer must specify the other funds/equipment source for the project to be deemed fundable.
- IV. Equipment or computers that should generally 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.

- V. by signing the cover page, the faculty mentor 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: You should contact the General Accounting Office at 656-1477 or email general.accounting@uvm.edu for more information before making travel plans.
- VII. 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 the proposed research experience for the student, and the record of the proposed faculty mentor about their ability and availability to provide sound mentoring in the proposed research area. Consideration will be given to the content, grammatical correctness, and clarity of the narrative in student writing. Evaluators will also consider whether the student has determined their qualifications to carry out the research and whether it can be completed within the proposed budgetary, time, and facilities constraints. Each application must 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 roles and expected contributions.

8. Evaluation Process

A review panel of CEMS faculty will evaluate each proposal. The review panel will make recommendations to the program director, who shall decide 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 Luis Garcia, Professor of Civil and Environmental Engineering, at Luis.Garcia@uvm.edu