Undergraduate Research in Engineering

Effective: May 12, 2022

This policy describes procedures required to register for Engr 631/632 *Undergraduate Research I/II*. This policy updates and supersedes all prior policies. *Undergraduate Research* courses qualify as Engineering Electives; they may not substitute for required courses in B.E. programs at Maritime College without special permission.

A. Course Descriptions:

ENGR 631 Undergraduate Research I
3 credits.
This course offers undergraduate engineering students the opportunity to help expand the body of human knowledge by researching a topic on the edge of current engineering understanding. This research experience is a valuable gateway to the personal development of knowledge creation skills which distinguish the best in their fields. Students may take an additional semester of undergraduate research (ENGR 632) but may not apply more than 6 credit hours of undergraduate research to their program of study. This course is intended for advanced students and requires the express consent of the faculty member serving as research advisor.
Prerequisite: Permission of the chair.

ENGR 632 Undergraduate Research II
3 credits.
This course can be taken as an extension of work begun in ENGR 631, or when a second, unrelated undergraduate research project is undertaken.
Prerequisites: ENGR 631, permission of the chair.

B. Required documentation:

Students seeking to undertake a research project must prepare a written proposal in conjunction with an Engineering faculty member who serves as mentor and director of the work. Once approved by the faculty mentor, the proposal must be approved by the chair of the student's home engineering department. Registration occurs via a *Closed Course Override Request*, with the mentor as instructor of record. Work may take place during the academic year or a summer session. The proposal must include the following, at minimum:

1. Title block with student name, course number and name, instructor, credit value, semester and year.
2. Description of the work in sufficient detail to justify the credit value of the course.
3. A list of specific Learning Objectives to be accomplished by the student during the course.
4. A list of the deliverables that will be completed by the student during the semester. There must be a specified mid-semester deliverable, and a mid-semester grade must be recorded for the student. Generally, every independent study must culminate with a final written report. The course is required to include a 'culminating activity,' which could include a final exam, oral presentation of the final report, poster presentation, etc.
5. Signatures of the student, Engineering faculty mentor and chair of the student's home engineering department.