

Capstone Design Intent Form

Engineering Majors graduating in May 2022 or January 2023 who wish to complete a capstone design project are required to submit a completed Capstone Design Intent Form by April 12, 2021 to Kristin Morse (kbmorse@smith.edu). Failure to submit this form to by this date may limit capstone opportunities.

A capstone design project is a central part of the Picker Engineering Program's Engineering Science major at Smith College. The capstone experience is a requirement for the Bachelor of Science degree and may be an option for students pursuing the Bachelor of Arts degree. The capstone design experience comprises the year-long two-credit course Engineering 410D *plus one* of EGR 421D, 422D, or 431D. Course descriptions of these courses are found in the Smith College Catalog.

Please check your choice below and indicate the prerequisites you will have successfully completed by the end of the current semester. If you select option B or C, please complete page 2 as well.

A. ☐ Team-Based Capstone Design Project (3 credits for 2 semesters = 6 credits)

Requires: Senior standing, completion of EGR 100, 220, 270, 290, 374 and at least one 300-level engineering course, plus an ability to work on open-ended problems in a team setting, or permission of the instructor. [EGR 422D Design Clinic] Register for EGR 422D via Workday during the early registration period in April.

☐ EGR 100 ☐ EGR 220 ☐ EGR 270 ☐ EGR 290 ☐ EGR 374 ☐ EGR 300-Level

B. ☐ Independent Capstone Design Project (3 credits for 2 semesters = 6 credits)

Requires: Senior standing, completion of EGR 220, 270, 290, 374 and at least one 300-level engineering course, plus a clear demonstration of intent and a faculty sponsor. [EGR 421D Capstone Design with Faculty] Register for EGR 421D by submitting a signed special studies form to the Registrar.

☐ EGR 220 ☐ EGR 270 ☐ EGR 290 ☐ EGR 374 ☐ EGR 300-Level

C. ☐ Independent Capstone Design Project with Honors (4 credits for 2 semesters = 8 credits)

Requires: Senior standing, completion of EGR 220, 270, 290, 374 and at least one 300-level engineering course, plus a clear demonstration of intent, a faculty sponsor, and an eligible GPA. [EGR 431D Honors Capstone Design with Faculty – No online registration available. Departmental honors application required. Students will be registered after add/drop/]

☐ EGR 220 ☐ EGR 270 ☐ EGR 290 ☐ EGR 374 ☐ EGR 300-Level

Signatures

Student: _____ Signature: _____ Date: _____

Faculty Sponsor¹: _____ Signature: _____ Date: _____

Academic Advisor: _____ Signature: _____ Date: _____

Program Dir/Assistant Dir: _____ Signature: _____ Date: _____

¹ Required for Options B and C only.

Proposed Independent Capstone Project

Required for EGR 421D and EGR 431D only.

Proposed Project Title:

Summary of Proposed Project *with explanation of design component(s):*

Sponsoring Faculty Member²:

Estimated Project Cost:

Potential Funding Sources (if needed):

Other Resources Required:

Additional Information:

ABET's Criterion 5 establishes that the Bachelor of Science in Engineering Science curriculum must include a culminating major engineering design experience that 1) incorporates appropriate engineering standards and multiple constraints, and 2) is based on the knowledge and skills acquired in earlier course work. ^[1]_{SEP}

Please explain how you will satisfy these culminating design experience requirements.

Describe all other relevant experience (e.g., internships, course projects, J-term classes):

² The sponsoring faculty member must be in the Picker Engineering Program. Faculty members are most likely to support capstone projects that are clearly defined, financially and technically feasible, and for which the students are well prepared. Such preparation generally includes successful prior work with that faculty member (i.e., summer internships, special studies, etc.) as well as courses and other experiences that provide the necessary foundation for the proposed work.