

Honors Opportunities in the CESE Program

Barrett, The Honors College at ASU, is a selective, small undergraduate college responsible for recruiting academically outstanding undergraduates to ASU and organizing the resources of that major research university for their benefit. The Civil, Environmental and Sustainable Engineering (CESE) program in the School of Sustainable Engineering and the Built Environment and the Barrett Honors College work together to provide their students academic advising, research and internship opportunities, scholarship information and access to distinguished lectures and other special events.

By taking CEE courses under an honors designation, CESE honors students work on special projects that provide them an expanded understanding of the course subject matter. These courses allow the students to work on exciting research with faculty members. Such experiences distinguish honors students from other students and help them gain entrance to graduate programs and/or achieve better career.

Most CEE courses are offered for honors credit through the honors enrichment contract. Students wishing to receive honors credit should confer with the course instructor at the beginning of the semester in order to develop a mutually acceptable plan for the honors contract activity. Most honors contracts involve either a project that extends the ideas and techniques covered in the course or outside research on topics relevant to the course work. Students have the responsibility to apply for the honors contract through the Barrett Honors College. The Honors College contacts the instructor to approve the contract only after the student has initiated the process. In addition, students enrolled in CEE 212 will automatically receive honors credit for the course.

Honors students receive special invitations to various events, including meeting industry, faculty and staff. They can also gain funding for research or travel to conferences held in other cities.

Academic Requirements

To graduate as a Barrett Honors student, you must meet certain academic requirements listed on the [Barrett Honors College Web site](#). Prospective students should review the Admission Frequently Asked Questions [Admissions FAQs](#) for additional information including the application deadlines, minimum entrance requirements, and more.

Honors students may take advantage of the Fulton Undergraduate Research Initiative, which provides a stipend and a small amount of funding for undergraduate research. Honors students may use their FURI-funded project as their honors research. For more information on the FURI program, please visit the [FURI website](#).

Honors Thesis in CESE

An honors thesis may be completed in one of two ways within CESE. It can be completed either as a supplement to the CEE Capstone course or as an independent study under the advisement of a CESE faculty member (Thesis Director). The thesis can be in any civil engineering area such as environmental, geotechnical, hydrosystems, structures, sustainability, transportation, or another closely related area.

- Capstone: Upon approval, the thesis may be completed as part of the student's CEE capstone project (CEE 486). This would be conducted as part of the standard capstone experience. In most cases, the Thesis Director will be the advisor for the Capstone Project. Students must do something extra for their project, such as more extensive literature review, additional experiments, additional analysis, or a discussion of the social/economic/environmental impact of their project.
- Independent Study: The thesis is an independent project performed under the mentorship of a CESE faculty member.

In both cases, the student should enroll for the appropriate credit hours (see below).

Committee Structure: the minimum number of committee members is two, one of which must be the Thesis Director. Currently only the director **MUST** be an ASU faculty member (i.e. tenure-line faculty, research faculty, lecturer, professor of practice). The Second Committee Member may be faculty or non-faculty, depending on the decision of the Thesis Director or the academic unit of the director. A third committee member is not needed unless specified by the director or the academic unit of the director **OR** unless an external examiner is added (who will be a third committee member).

Enrolling for Honors Thesis in CESE: It is highly recommended that the student identify a Thesis Director and meet to discuss their intention to work with them and the nature of the proposed honors thesis the semester before they intend to start.

For the both the Capstone and Independent Study options, Honors thesis work is conducted over 2 semesters for 6 credits as follows:

- Semester I – CEE 492 Honors Directed Study (3 credits)
- Semester II – CEE 493 Honors Thesis (3 credits). Honors students may use CEE 493 Honors Thesis as a technical elective with credit towards the BSE degree only if the thesis topic is not related to the CEE 486 topic.

These must be taken in sequence and cannot be taken together in a single semester, though an intervening semester is allowable in some cases.

Important: Prior to enrolling in CEE 492 or 493, all students must complete a thesis/creative project information session. Students may meet this requirement by completing any of the following:

- A thesis preparation course within CEE (not currently available but may be an option in the future)
- HON 498 "Thesis Prep Course," a one-credit course offered on the downtown campus
- One of the Thesis Workshop Sessions periodically offered by Barrett
- The on-line workshop offered through Barrett via ASU Blackboard.

Please follow the following link for more information:

<http://barretthonors.asu.edu/academics/thesis-and-creative-project/>

Following completion of a thesis/creative project information session, CESE students can enroll for Honors Thesis credits by contacting an academic advisor.

Students must be enrolled by no later than the Add/Drop date of each semester. Failure to do so may mean the student's thesis studies are delayed.

Getting more information about an Honors Thesis: There are lots of resources available regarding the process and expectations for Honors Thesis. We recommend that you do some of the following:

- Explore Barrett Resources: Barrett has excellent online resources for defining an Honors Thesis projects.
- Attend a Thesis Workshop by Barrett.
- Talk to CESE Faculty.
- Review past thesis documents available at Barrett: <https://barretthonors.asu.edu/academics/thesis-and-creative-project/examples-and-past-projects>. You may also schedule an appointment to view physical past projects in the Barrett Thesis Library.
- Attend thesis defenses: This will give you a sense of how you should present your outcomes as well as the kinds of questions you might expect. A schedule of upcoming defenses can be found at: <https://barretthonors.asu.edu/academics/thesis-and-creative-project/defense/defense-calendar>
- Talk to other CESE Honors students: This would help you avoid pitfalls and plan for your thesis.
- Talk to the CESE Faculty Honors Advisor or an academic advisor.

Financial Support for Honors Thesis in CESE: Barrett has support and funding for Honors Thesis work:

- Thesis Funding – Students may apply to receive up to \$500 to complete their thesis. This funding may be used to cover materials and supplies needed to complete the project.
- Honors Project Fund – Typically used for non-thesis related expenses such as presenting a paper at a conference or attending an annual meeting related to your major. The funds may be used to cover such costs as travel, hotel, conference registration and supplies.
- External Examiners Program – As part of the thesis defense, students can apply to bring in an outside examiner or expert from another institution to serve as a thesis committee member. Students may receive up to \$1500 toward the associated expenses, such as airfare and hotel.

Example Honors Thesis schedule

Junior Year

End of Spring Semester

- Find a faculty member to advise you on your Honors Thesis (the Thesis Director) and begin discussing possible projects
- Enroll in CEE 492 for 3 credits

Senior Year

Fall Semester

- Work with your Thesis Director to define your project and to formulate an action plan for the project (the Prospectus)
- Prepare your Prospectus and submit it to Barrett -see: <https://barretthonors.asu.edu/academics/thesis-and-creative-project/student-guidebook>
- Complete background review for project
- Enroll in CEE 493 for 3 credits for the spring semester

Spring Semester

- Continue working on project and begin preparing thesis document

Before Spring Break

- Complete first draft of the thesis document and submit to Thesis Director for initial review
- Schedule your thesis defense - remember this is your responsibility – by completing the Thesis/Creative Project Defense Reporting Form –see: <https://barretthonors.asu.edu/academics/thesis-and-creative-project/defense>
- Note that a draft of the thesis should be sent to the entire committee for review at least two weeks before your defense

After Spring Break

- Prepare for your defense!
- Hold defense and, following a successful outcome, get the Signature Title Page signed by all committee members
- Make any necessary changes to the thesis document based on feedback from committee

Early April

- Submit final thesis document to Barrett!

We are here to support your success at Barrett and we encourage you to enrich your experience by actively participating in all facets of the Barrett college experience. For assistance in finding a research faculty advisor, please contact Dr. Mike Mamlouk, the CESE honors faculty advisor, mamlouk@asu.edu, 480-965-2892.

Faculty Honors Advisor

Michael Mamlouk

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