

UPPER DIVISION HONORS REQUIREMENTS

CHEMICAL ENGINEERING

Students in the Honors or University Scholars programs who are majoring in Chemical Engineering are required to complete an Honors Thesis (three credit hours, minimum) and at least six (6) additional credits of approved Upper-Division Courses and/or Independent Studies. These credits can be used to fulfill graduation requirements within the traditional program, by substituting for senior chemical and biomedical engineering electives. In addition, students in the Honors program must complete an Honors Thesis (three credit hours, minimum). Credits earned through these guided research activities could be used towards the fulfillment of the Advanced Science Elective requirement.

Aiming to address a variety of educational goals (preparation for industry, graduate school, medical school, professional schools, etc.), the upper-division honors and university scholars program of the Chemical and Biomedical Engineering Department is to be tailored for each individual student.

Students will select, or be assigned, an Upper-Division adviser who will assist the student in formulating a "Plan of Study" designed to achieve the student's educational. This plan of study must be formulated by the first semester of the student's junior year, and filed with the student's academic records and the Honors and University Scholars Programs Office.

Upper-Division Honors and University Scholars Program:

- Students in the Honors and University Scholars Programs will fulfill the six (6) credits requisite of upper-level technical electives by enrolling in two (2) 500-level graduate courses in Chemical and Biomedical Engineering. Students in the Upper-Division are allowed to enroll in a graduate-level course so long as the prerequisites are met or approval from the course instructor is secured. These courses will fulfill the two (2) Chemical and Biomedical Engineering Technical Electives graduation requirement.
- All Chemical Engineering Honors students are *required* to write and present a thesis in their senior year, as a culmination of their honors experience. Students completing this requirements should register for CHE 499H (Chemical and Biomedical Engineering Honors Thesis). Thesis work will be performed under the guidance of a faculty member of the Department of Chemical and Biomedical Engineering and may take the form of a proposal, a research paper, a business plan, or a design project, representing the work and interest of the student. At the outset, the topic and scope of the thesis will be detailed and approved by the student's academic and honors adviser(s).

- If the proposed research project for the Honors Thesis is anticipated to require more than one semester, the student can register for CHE 496H (Chemical and Biomedical Engineering Honors Project) in those semesters when research is performed prior to the semester when the Honors Thesis completion (CHE 499H) is anticipated. Unlike the traditional Chemical and Biomedical Engineering (Senior) Project (CHE 496, open to seniors only), this course will be open to both juniors and seniors in the Honors Program. Students in the University Scholars Program can become eligible to register in CHE 496H by requesting permission from the Honors and Departmental Programs.
- Conference attendance Senior honors students will have the opportunity to travel to a regional, national, or international professional meeting with his or her project adviser. If appropriate, students will be encouraged to present work performed towards completion of the Honors Thesis. Funds will be available to support travel and/or conference fees.
- Replaced courses: Credits from the honors courses can be used to replace two chemical and biomedical engineering electives as well as the advanced science elective.
- Accelerated Masters Program: Students in the Honors and University Scholars Programs are eligible to participate in the Accelerated Masters Programs available in the College of Engineering. In order for the Upper-Division course work to be applicable towards these accelerated programs, students must be admitted to the corresponding Accelerated Masters Program prior to registering for the applicable courses. Students in the Accelerated Masters Program in Chemical Engineering must register for CHE 598 (Master's project), instead of CHE 499H, when completing their Honors Thesis.

Biomedical Engineering:

- a) Take two 500-level Chemical Engineering electives
- b) Take CHE 499H (which substitutes for the required advanced science elective required for the Chemical Engineering major)