Department of Chemical and Biological Engineering

• Major
  • Chemical and Biological Engineering (BSChE)

Chemical and Biological Engineering Honors Program

The departmental honors program complements programs offered through the UA’s Honors College (CBH, IHP). The highlight of the ChBE honors program is a one-hour forum that focuses on emerging topics of interest in the field. In addition to this course, six hours of departmental honors course credits may be scheduled through the CHE 498 Honors Special Problems/CHE 499 Honors Special Problems sequence or as other designated courses. These credits may include one-on-one undergraduate research experiences, co-op or internship-for-credit experiences, work/study-abroad-for-credit experiences, and courses designed to be taken for joint undergraduate/graduate credit in the Scholars Program leading to advanced degree study. Five additional hours of honors credit must be taken from courses within the ChBE curriculum, and six further hours of honors credits must be earned from any of the University-wide honors programs. The chemical engineering honors courses may, in turn, be used to satisfy the requirements in the University-wide honor program(s) selected. Special recognition for completing these programs is given at the time of graduation.

Eligibility

• Incoming freshmen: ACT of 28 or better or SAT of 1240 or better
• Transfer students: cumulative college grade point average of 3.3 or better and 28 ACT/1240 SAT
• Current UA students: cumulative UA grade point average of 3.3 or better

Requirements for Recognition as Graduating with ChBE Honors

• Completion of the course requirements for the BS degree in Chemical Engineering
• Maintenance of a 3.3 grade point average in all undergraduate coursework
• Completion of 18 hours of honors coursework:
  • 12 hours in the ChBE curriculum:
    • One hour of ChBE Honors Forum
    • Six hours of ChBE-designated courses
    • Five hours of any courses in the ChBE curriculum
  • Six hours of additional honors courses from within or outside the ChBE curriculum
  • Experiential-based coursework
  • Three hours must be experience-based, such as undergraduate research, co-op for credit, work internship for credit, undergraduate design or a research experience at another university (REU)
  • Examples of Honors Courses Offered in ChBE:
    • Independent Research or Design Projects
    • ChBE Electives in Polymers, Electronic Materials, Biochemical Engineering, Tissue Engineering, or Health and Safety
    • Honors Co-operative Education and Internship Experiences
    • ChBE Honors Forum (explore advanced topics such as Nanotechnology, Hydrogen Fuel Cells, Engineered Medicine or Alternative Energy)

Interim Department Head

• Brazel, Christopher S.

Professors

• Arnold, David W.
• Gupta, Arunava
• Lane, Alan M.
• Turner, C. Heath
• Van Zee, John W.
• Wiest, John M.

Associate Professors

• Bara, Jason E.
• Bao, Yuping
• Carlson, Eric S.
• Brazel, Christopher S.
• Klein, Tonya M.

Assistant Professors

• Ritchie, Stephen M. C.

Assistant Professors

• Huang, Qiang
• Kim, Yonghyun John
• Liu, X. Margaret
• Peng, Qing
• Rao, Shreya S.
• Summers, Ryan M.

Adjunct Professors

• Clark, Peter E.
• Weaver, Mark L.

Instructor

• Kherfan, Sadeddin

CHE

125

Hours

1

Introduction To Chemical Engineering

An introduction to the chemical engineering profession, its history and its career-enabling potential. The course contains selected topics, and alumni seminars covering the full range of career opportunities from emerging areas (nanotechnology, biochemical, multifunctional materials) to those found in the more traditional positions within the chemical, petrochemical and petroleum industries.

CHE

225

Hours

1

Chemical & Biological Engineering Honors Forum

Designed to expose students to the rich array of resources, ideas, and experiences of chemical engineering. Emphasis and content based on faculty member’s area of expertise.

View All Courses

Faculty

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