Chemical Engineering

UNIVERSITY OF ARKANSAS | College of Engineering

The Ralph E. Martin Department of Chemical Engineering delivers robust undergraduate and graduate programs. The undergraduate program features a high caliber internship program. Faculty and students are engaged in research programs funded by federal, state, and industrial sources. Membrane separations is the major focus for several faculty, and the department is one of three sites of the Membrane Science, Engineering and Technology Center, one of the longest-running university-industry research partnerships fostered by the National Science Foundation. Faculty research in chemical process safety and lifecycle assessment has saved lives and increased sustainability in food production. Our biochemical and bioprocess engineering programs have spun off companies that produce new therapeutic drugs. In partnership with the Institute for Nanoscience and Engineering and the Arkansas High Performance Computing Center, our research teams are designing, fabricating, and testing the next generation of nanomaterials.

Our faculty also serve the community and their profession by contributing expertise to STEM outreach efforts, serving in director roles at the National Science Foundation, participating in multi-university centers, and taking on leadership roles in their professional organizations. Our graduate students receive national awards and advance to careers in industry, academia, and government. Our undergraduate students regularly receive recognition for their design and research skills, including the Goldwater Scholarship, the National Science Foundation Graduate Research Fellowship and awards from the WERC competition. Many of our former students are pursuing advanced degrees at top graduate programs.

2016-2017 STUDENT STATISTICS

Undergraduate
306

Graduate
40

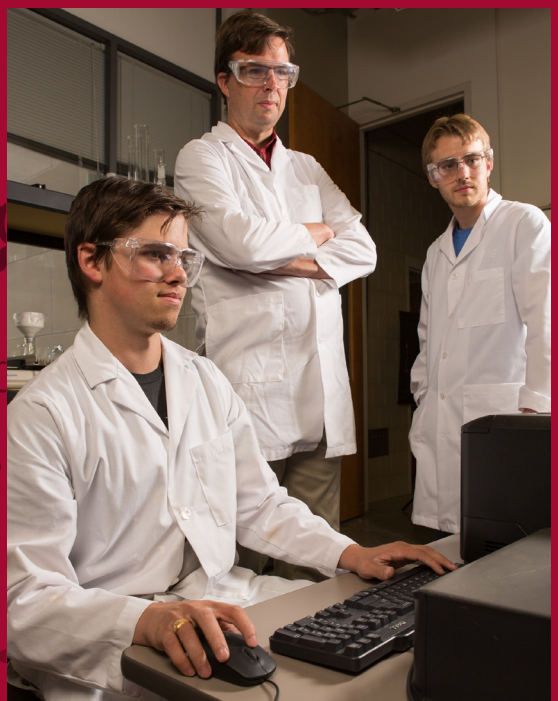
Female
35%

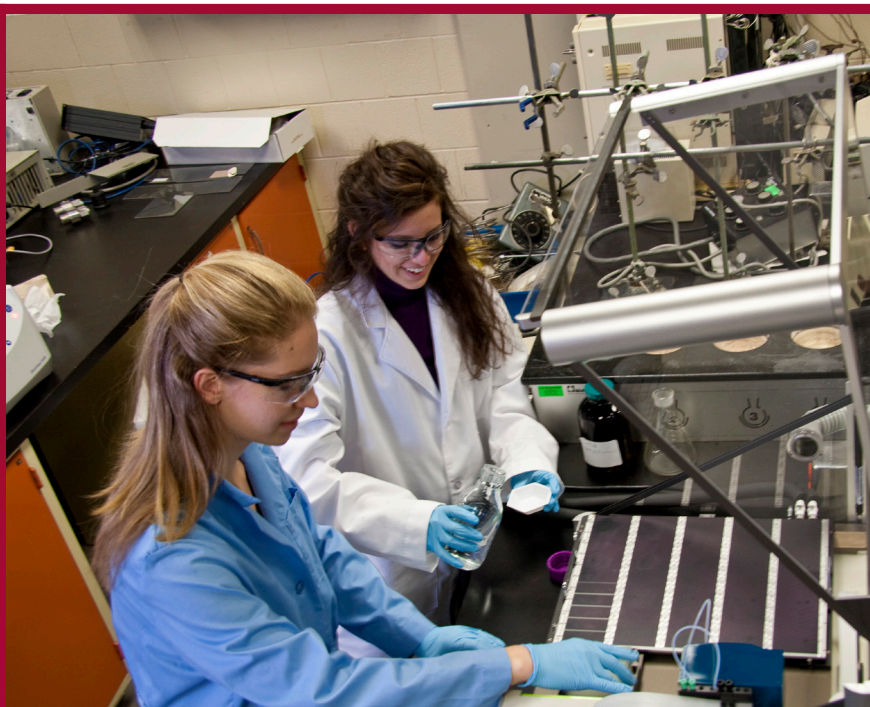
Ethnic Minority
20%

First Generation Undergraduate
21%

Placement[1]
88%

[1]Self reported percentage of students graduating in the past two years who were employed as engineers or attending graduate school within three months of graduating.





DEPARTMENT HEAD
DAVID FORD

chemical-engineering.uark.edu

Last Updated 5/8/2017

RESEARCH AREAS

- Membrane modification, modeling and applications to separation processes
- Biochemical engineering, including fermentation and genetic engineering
- Biomass conversion to liquid fuels
- Biomimetic materials for biomedical applications
- Bioseparations, emphasizing early detection and treatment of diseases
- Nanomaterials, including their production, properties and applications
- Chemical hazards assessment
- Lifecycle assessment
- Molecular-level modeling and simulation

Tenured and Tenure Track Faculty

14

CENTERS

- Membrane Science, Engineering & Technology Center
- Chemical Hazards Research Center

New Research Awards FY 2016

$2.0M

CHAIRS AND PROFESSORSHIPS

David Ford
Ralph E. Martin Endowed Leadership Chair in Chemical Engineering

Lauren Greenlee
Louis Owen Endowed Professorship in Green Chemical Process Design and Development

Christa Hestekin
Ansel and Virginia Condray Endowed Professorship in Biochemical and Chemical Separations

Jamie Hestekin
Jim L. Turpin Endowed Professorship in Chemical and Biochemical Separations

Donald Keith Roper
Charles W. Oxford Endowed Professorship in Emerging Technologies

Tom Spicer
Maurice E. Barker Endowed Chair in Chemical Process Safety and the Environmental Fate of Chemicals

Greg Thoma
Bates Endowed Teaching Professorship in Chemical Engineering

Ranil Wickramasinghe
Ross E. Martin Endowed Chair in Emerging Technologies

FELLOWS

- Robert Babcock: American Institute of Chemical Engineers
- D. Keith Roper: American Institute for Medical and Biological Engineering
- Tom Spicer: American Institute of Chemical Engineers
- Ranil Wickramasinghe: American Institute of Chemical Engineers