

# ARTIE MCFERRIN DEPARTMENT OF CHEMICAL ENGINEERING

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Chemical engineering is a broad field of engineering and thus requires a diverse preparation in science and engineering. Distinguishing chemical engineering from other engineering disciplines is its use of chemical and biochemical reactions to produce products and materials for society. Traditionally, chemical engineers have provided leadership in the petrochemical, refining, chemical, polymer, and food processing industries. Because of strengths in the foundation sciences of mathematics, chemistry, physics and biology, as well as in engineering, this leadership role has now extended to the biochemical, biomedical, high-tech materials, semi-conductor and microelectronics, nanotechnology, environmental quality, safety, and a host of other areas. Chemical engineers have consistently commanded starting salaries among the highest of all college graduates because of the combined breadth and depth of their education.

The mission of the Artie McFerrin Department of Chemical Engineering at Texas A&M is to educate and prepare students for national and international leadership roles in industry, government, and academia; to attract top students to chemical engineering; to define and develop new directions in chemical engineering fundamentals and practices, and in chemical engineering education and curricula; to be a valuable resource and service base to the State and to industry; and to provide leadership in solving problems of social and economic importance.

Objectives of the chemical engineering program are that

1. graduates will have successful chemical engineering careers in industry, academia or government,
2. graduates will obtain, apply and transfer knowledge across disciplines and into emerging areas of chemical engineering and related fields,
3. graduates will communicate effectively, be leaders in their fields and work competently in interdisciplinary teams, and
4. graduates will be professionally responsible and ethical and engage in professional activities to impact the society on a global scale.

To supplement coursework, well-equipped laboratories provide our students with experiences in operating and analyzing a variety of unit operations and process control equipment and in the use of the modern computational tools and software used in chemical engineering. The department offers vibrant undergraduate research, co-op and study abroad programs that provide students with additional enrichment and experiential opportunities.

The undergraduate program in Chemical Engineering at Texas A&M University is accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org), and compares favorably with the best in the nation.

Before commencing course work in the major, students must be admitted to the major or have the approval of the department.

## Faculty

Akbulut, Mustafa, Associate Professor  
Chemical Engineering  
PHD, University of California, Santa Barbara, 2007

Balbuena, Perla B, Professor  
Chemical Engineering  
PHD, University of Texas, 1996

Barteau, Mark A, Professor  
Chemical Engineering  
PHD, Stanford University, 1981

Blizzard, Gary Edward, Senior Lecturer  
Chemical Engineering  
MBA, The University of Texas at Austin, 2000

Cheng, Zheng Dong, Professor  
Chemical Engineering  
PHD, Princeton University, 1999

Cochrum, Alan M, Lecturer  
Chemical Engineering  
PHD, University of Texas at Arlington, 2015

El-Halwagi, Mahmoud M, Professor  
Chemical Engineering  
PHD, University of California, Los Angeles, 1990

Elabd, Yossef A, Professor  
Chemical Engineering  
PHD, Johns Hopkins University, 2001

Gagnon, Zachary, Associate Professor  
Chemical Engineering  
PHD, University of Notre Dame, 2009

Glover, Charles J, Senior Professor  
Chemical Engineering  
PHD, Rice University, 1975

Green, Micah, Professor  
Chemical Engineering  
PHD, Massachusetts Institute of Technology, 2007

Harris, James E, Professor of the Practice  
Chemical Engineering  
PHD, University of Texas, Austin, 1981

Hasan, M M Faruque, Associate Professor  
Chemical Engineering  
PHD, National University of Singapore, 2010

Hilaly, Ahmad K, Professor of the Practice  
Chemical Engineering  
PHD, Colorado State University, 1992

Holste, James C, Senior Professor  
Chemical Engineering  
PHD, Iowa State University, 1973

Holtzapple, Mark T, Professor  
Chemical Engineering  
PHD, University of Pennsylvania, 1981

Isdale, Charles E, Senior Lecturer  
Chemical Engineering  
MBA, Southern Illinois University at Edwardsville, 1977

Jayaraman, Arul, Professor  
Chemical Engineering  
PHD, University of California, Irvine, 1998

Jeong, Hae-Kwon, Professor  
Chemical Engineering  
PHD, University of Minnesota, 2004

Kao, Katy C, Associate Professor  
Chemical Engineering  
PHD, University of California, Los Angeles, 2005

Karim, Muhammad N, Professor  
Chemical Engineering  
PHD, University of Manchester, 1977

Khosravianghadikolaei, Homa, Research Assistant Professor  
Chemical Engineering  
PHD, University of Illinois at Chicago, 2013

Kravaris, Costas, Professor  
Chemical Engineering  
PHD, California Institute of Technology, 1984

Kuo, Yue, Professor  
Chemical Engineering  
PHD, Columbia University, 1980

Kwon, Joseph, Assistant Professor  
Chemical Engineering  
PHD, University of California, Los Angeles, 2015

Lele, Pushkar P, Assistant Professor  
Chemical Engineering  
PHD, University of Delaware, Newark, 2010

Lutkenhaus, Jodie L, Associate Professor  
Chemical Engineering  
PHD, Massachusetts Institute of Technology, 2007

Mannan, Mahboobul, Professor  
Chemical Engineering  
PHD, University of Oklahoma, 1986

Mashuga, Chad V, Assistant Professor  
Chemical Engineering  
PHD, Michigan Technological University, 1999

Pistikopoulos, Efstratios, Professor  
Chemical Engineering  
PHD, Carnegie Mellon University, 1988

Raftery, Jonathan P, Lecturer  
Chemical Engineering  
PHD, Texas A&M University, 2017

Rogers, William J, Lecturer  
Chemical Engineering  
PHD, Ohio State University, 1976

Seminario, Jorge M, Professor  
Chemical Engineering  
PHD, Southern Illinois University Carbondale, 1987

Shahrashoob, Zahra, Lecturer  
Chemical Engineering  
PHD, University of Oklahoma, 2018

Sun, Qing, Assistant Professor  
Chemical Engineering  
PHD, University of Delaware, 2010

Tamamis, Phanourios, Assistant Professor  
Chemical Engineering  
PHD, University of Cyprus, 2010

Vaddiraju, Sreeram, Associate Professor  
Chemical Engineering  
PHD, University of Louisville, 2006

White, James D, Senior Lecturer  
Chemical Engineering  
BA, Texas A&M University, 1978

Wilhite, Benjamin A, Associate Professor  
Chemical Engineering  
PHD, University of Notre Dame, 2003

Wilson, Christin M, Lecturer  
Chemical Engineering  
PHD, The Ohio State University, 2012

Wu, Hung-Jen, Associate Professor  
Chemical Engineering  
PHD, Texas A&M University, 2006

## Majors

- Bachelor of Science in Chemical Engineering (<http://catalog.tamu.edu/undergraduate/engineering/chemical/bs/>)

## Minors

- Chemical Engineering Minor (<http://catalog.tamu.edu/undergraduate/engineering/chemical/minor/>)

## Certificates

- Engineering Therapeutics Manufacturing Certificate (<http://catalog.tamu.edu/undergraduate/engineering/chemical/therapeutics-manufacturing-certificate/>)