

DEPARTMENT OF BIOMEDICAL ENGINEERING

The objectives of the Biomedical Engineering program are to produce high-quality graduates with a broad-based education in engineering, life sciences and natural sciences applied to the fields of biomechanics, cellular and molecular bioengineering, computational bioengineering, medical devices, regenerative medicine, or imaging, sensing, and digital health who:

1. Are well prepared for further graduate studies, careers in the biomedical or biotechnology industries or entry into medical or other professional schools;
2. Will make significant contributions in biomedical industries, medicine and other sectors;
3. Will apply acquired knowledge appropriately, work professionally with others, effectively communicate ideas and technical information and continue to learn and improve their knowledge base and skills.

These objectives are met through a modern and comprehensive curriculum taught by a well-prepared, professionally active and dedicated faculty. In addition, the program actively supports professional development among the students through individual study and research opportunities, cooperative education and internships, and student society activities. These goals are measured by the success of the graduates in finding rewarding professional employment, and by admission to respected graduate and professional schools.

Design is an important part of biomedical engineering and design skills are cultivated through a series of design courses, beginning in the first year in the program, culminating in the two-semester senior design course sequence that requires the application of a wide range of engineering methods to a focused design project. Other courses in biomedical engineering and in supporting disciplines include examples of the application of the principles to design, as well as specific design exercises. The biomedical engineering curriculum is accredited by the Engineering Accreditation Commission of ABET, www.abet.org.

Before commencing coursework in the department, students must be admitted to the major or minor.

Faculty

Alge, Daniel L, Professor
Biomedical Engineering
PHD, Purdue University, 2010

Avazmohammadi, Reza, Assistant Professor
Biomedical Engineering
PHD, University of Pennsylvania, Philadelphia, PA, 2014

Bagnato, Vanderlei S, Professor
Biomedical Engineering
PHD, Massachusetts Institute of Technology, 1987

Biswas, Saurabh, Professor of the Practice
Biomedical Engineering
PHD, Texas A&M University, 2011

Bujnoch, Zachary W, Associate Professor of the Practice
Biomedical Engineering
MBA, University of Texas - San Antonio, 2022

Carrell, Travis James, Instructional Assistant Professor
Biomedical Engineering
PHD, Texas A&M University, 2022

Ceylan Koydemir, Hatice, Assistant Professor
Biomedical Engineering
PHD, MIDDLE EAST TECHNICAL UNIVERSITY, 2013

Chukkapalli, Sasanka S, Research Assistant Professor
Biomedical Engineering
PHD, Post Graduate Institute of Medical Education & Research (PGIMER)
Chandigarh, India, 2009

Cote, Gerard L, Professor
Biomedical Engineering
PHD, University of Connecticut, 1990

Criscione, John C, Professor
Biomedical Engineering
MD, Johns Hopkins University, 1999
PHD, Johns Hopkins University, 1999

Diaz Garelli, Franck, Instructional Associate Professor
Biomedical Engineering
PHD, University of Texas Health Science Center Houston, 2016

Gaharwar, Akhilesh K, Professor
Biomedical Engineering
PHD, Purdue University, 2011

George, Jason T, Assistant Professor
Biomedical Engineering
MD, Baylor College of Medicine, 2020
PHD, Rice University, 2019

Gibbs, Holly C, Research Assistant Professor
Biomedical Engineering
PHD, Texas A&M University, 2014

Grunlan, Melissa A, Professor
Biomedical Engineering
PHD, University of Southern California, 2004

Hanks, John Philip, Professor of the Practice
Biomedical Engineering
MS, University of Texas, Austin, 1989

Haridas, Balakrishna, Professor of the Practice
Biomedical Engineering
PHD, University of Cincinnati, 2001

Hedman, Annie, Instructional Assistant Professor
Biomedical Engineering
PHD, Texas A&M University-College Station, 2022

Horn, John D, Instructional Assistant Professor
Biomedical Engineering
PHD, Texas A&M University, 2018

Horn, Staci Jessen, Research Assistant Professor
Biomedical Engineering
PHD, Texas A&M University, 2016

Hoyt, Kenneth L, Professor
Biomedical Engineering
PHD, Drexel University, 2005

Hwang, Wonmuk, Professor
Biomedical Engineering
PHD, Boston University, 2001

Jain, Abhishek, Associate Professor
Biomedical Engineering
PHD, Boston University, 2012

Kaunas, Roland R, Associate Professor
Biomedical Engineering
PHD, University of California at San Diego, 2003

Lele, Tanmay P, Professor
Biomedical Engineering
PHD, Purdue University, 2002

Ligler, Frances S, Professor
Biomedical Engineering
DSC, Oxford University, Oxford, UK, 2000
PHD, Oxford University, Oxford, UK, 1977

Mabbott, Samuel Bernard, Associate Professor
Biomedical Engineering
PHD, University of Manchester, Manchester Interdisciplinary Biocentre, 2012

Maitland, Duncan J, Senior Professor
Biomedical Engineering
PHD, Northwestern University, 1995

McDougall, Mary P, Professor
Biomedical Engineering
PHD, Texas A&M University, 2004

McShane, Mike, Professor
Biomedical Engineering
PHD, Texas A&M University, 1999

Menon, Jyothi U., Associate Professor
Biomedical Engineering
PHD, University of Texas, Southwestern Medical Center, 2014

Monroe, Mary B, Associate Professor
Biomedical Engineering
PHD, Texas A&M University, 2013

Montgomery, William D, Visiting Associate Professor of the Practice
Biomedical Engineering
MS, US Army War College, 2016

Patrick, Charles W, Professor of the Practice
Biomedical Engineering
PHD, Rice University, 1994

Pires, Layla, Assistant Professor
Biomedical Engineering
PHD, University of Sao Paulo, 2017

Raghavan, Shreya Artha, Associate Professor
Biomedical Engineering
PHD, Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences, 2014

Rahbar, Elaheh, Associate Professor
Biomedical Engineering
PHD, Texas A&M University, 2011

Reynolds, Jeff, Professor of the Practice
Biomedical Engineering
PHD, Purdue University, 1996

Southard, Derek, Visiting Associate Professor of the Practice
Biomedical Engineering
MBA, Penn State, 2020

Tian, Limei, Associate Professor
Biomedical Engineering
PHD, Washington University in St. Louis, 2014

Timmins, Lucas, Associate Professor
Biomedical Engineering
PHD, Texas A&M University, 2010

Walsh, Alexandra, Associate Professor
Biomedical Engineering
PHD, Vanderbilt University, 2015

Ware, Taylor H, Professor
Biomedical Engineering
PHD, University of Texas at Dallas, 2013

Yakovlev, Vladislav V, Professor
Biomedical Engineering
PHD, Moscow State University, 1990

Zhao, Feng, Professor
Biomedical Engineering
PHD, Tianjin University, 2001

Majors

- Bachelor of Science in Biomedical Engineering (<https://catalog.tamu.edu/undergraduate/engineering/biomedical/bs/>)

Minors

- Biomedical Engineering Minor (<https://catalog.tamu.edu/undergraduate/engineering/biomedical/minor/>)