

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Almost any technology that distinguishes the 20th and 21st centuries from previous history has the imprint of electrical and computer engineering - electric power, radio, television, radar, satellite communication, global positioning system, medical diagnostic and procedure systems, sophisticated domestic appliances, cell phones, computers and sophisticated sensors and control systems used in underwater, space exploration and national security. Electrical and computer engineering has advanced national and global prosperity through research, development and application of electrical and computer technologies and sciences for the benefit of humanity, and has helped create the global village. By choosing electrical or computer engineering our graduates embark on an exciting and productive career with endless opportunities and help in shaping a better future for mankind.

The curriculum is designed to prepare the undergraduate for work in the highly diverse electrical and computer engineering profession. A solid foundation in physics, chemistry and mathematics is used to support courses in the fundamentals of electrical and computer engineering. The use of computers is integrated throughout the curriculum, and basic studies in circuits, electronics, electromagnetic fields and digital logic lead to a flexible program of electives in the junior and senior year. Electives may be chosen from the broad fields of analog and mixed-signal electronics, biomedical imaging, sensing and genomic signal processing, computer engineering and systems, device science and nanotechnology, electric power systems and power electronics, electromagnetics and microwaves, and information science and learning systems. Laboratory work is structured to first familiarize the student with the basic concepts and then to apply these concepts to solve engineering problems.

Undergraduate education plays a major part in helping the department to achieve its mission. The Electrical and Computer Engineering programs are accredited by the Engineering Accreditation Commission of ABET, www.abet.org. More information on these efforts can be found at the Department of Electrical and Computer Engineering (<http://engineering.tamu.edu/electrical/>) website by clicking on the link for ABET Accreditation.

Faculty

Abu-Rub, Haithem A, Professor
Electrical & Computer Eng
PHD, Gdansk University of Technology, Poland, 1995

Alnuweiri, Hussein, Professor
Electrical & Computer Eng
PHD, University of Southern California, 1989

Annapareddy, Narasimha, Professor
Electrical & Computer Eng
PHD, University of Illinois at Urbana-Champaign, 1990

Awadallah, Selma, Engineering Assistant Professor
Electrical & Computer Eng
PHD, University of Manchester, 2014

Balog Jr, Robert S, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2006

Begovic, Miroslav M, Professor
Electrical & Computer Eng
PHD, Virginia Polytechnic Institute, 1989

Bhattacharyya, S P, Professor
Electrical & Computer Eng
PHD, Rice University, 1971

Birchfield, Adam, Assistant Professor
Electrical & Computer Eng
PHD, Texas A&M University, 2018

Bouhali, Othmane, Research Professor
Electrical & Computer Eng
PHD, Universite Libre de Bruxelles, Faculte des Sciences, 1999

Boutros, Joseph J, Professor
Electrical & Computer Eng
PHD, Telecom Paris Tech (ENST), 1996

Braga Neto, Ulisses, Professor
Electrical & Computer Eng
PHD, John Hopkins University, 2002

Butler-Purry, Karen L, Professor
Electrical & Computer Eng
PHD, Howard University, 1994

Cantrell Jr, Pierce E, Senior Associate Professor
Electrical & Computer Eng
PHD, Georgia Institute of Technology, 1981

Chamberland-Tremblay, Jean-Francois, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2004

Chen, Xin, Assistant Professor
Electrical & Computer Eng
PHD, Harvard University, 2022

Choi, Seong G, Associate Professor
Electrical & Computer Eng
PHD, University of Illinois, 1994

Datta, Aniruddha, Professor
Electrical & Computer Eng
PHD, University of Southern California, 1991

Davis, Katherine M, Associate Professor
Electrical & Computer Eng
PHD, University of Illinois at Urbana-Champaign, 2011

Duffield, Nicholas G, Professor
Electrical & Computer Eng
PHD, Queen Mary College, Univ. of London, 1987

Ehsani, Mehrdad, Professor
Electrical & Computer Eng
PHD, University of Wisconsin, Madison, 1981

Enjeti, Prasad N, Professor
Electrical & Computer Eng
PHD, Concordia University, Montreal, 1984

Entesari, Kamran, Professor
Electrical & Computer Eng
PHD, University of Michigan, 2006

Georghiadis, Costas N, Professor
Electrical & Computer Eng
PHD, Washington University in St. Louis, 1985

Ghrayeb, Ali, Professor
Electrical & Computer Eng
PHD, University of Arizona, 2000

Gratz, Paul V, Professor
Electrical & Computer Eng
PHD, The University of Texas at Austin, 2008

Han, Arum, Professor
Electrical & Computer Eng
PHD, Georgia Institute of Technology, 2005

Harris, Harlan R, Associate Professor
Electrical & Computer Eng
PHD, Texas Tech University, 2003

Hemmer, Philip R, Professor
Electrical & Computer Eng
PHD, Massachusetts Inst of Technology, 1984

Hou, I-Hong, Professor
Electrical & Computer Eng
PHD, University of Illinois Urbana Champaign, 2011

Hoyos, Sebastian, Professor
Electrical & Computer Eng
PHD, University of Delaware, 2004

Hu, Jiang, Professor
Electrical & Computer Eng
PHD, University of Minnesota, 2001

Iskander, Marco, Instructional Assistant Professor
Electrical & Computer Eng
MBA, University of Waterloo, 2020

Jang, Wonhyeok, Lecturer
Electrical & Computer Eng
PHD, University of Illinois at Urbana-Champaign, 2017

Ji, Jim X, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2003

Ji, Jim X, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2003

Kalafatis, Stavros, Professor of the Practice
Electrical & Computer Eng
MS, University of Arizona, 1991

Karsilayan, Aydin I, Associate Professor
Electrical & Computer Eng
PHD, Portland State University, 2000

Katehi-Tseregounis, Linda, Professor
Electrical & Computer Eng
PHD, University of California, 1984

Kezunovic, Mladen, Regents Professor
Electrical & Computer Eng
PHD, University of Kansas, 1980

Khatri, Sunil P, Professor
Electrical & Computer Eng
PHD, University of California at Berkeley, 1999

Kim, Soaram, Assistant Professor
Electrical & Computer Eng
PHD, Clemson University, 2018

Kish, Laszlo B, Professor
Electrical & Computer Eng
PHD, Uppsala University, Sweden, 1994

Kumar, Panganamala R, University Distinguished Professor and Regents
Professor
Electrical & Computer Eng
PHD, Washington University in St. Louis, 1977

Kurban, Hasan, Research Assistant Professor
Electrical & Computer Eng
PHD, Indiana University, 2017

Lin, Paotai, Associate Professor
Electrical & Computer Eng
PHD, Northwestern University, 2009

Liu, Tie, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2006

Lu, Mi, Professor
Electrical & Computer Eng
PHD, Rice University, 1987

Lusher, John D, Professor of the Practice
Electrical & Computer Eng
PHD, Texas A&M University, 2018

Madsen, Christi K, Professor
Electrical & Computer Eng
PHD, Rutgers State University of New Jersey, 1996

Manisseri Kalathil, Dileep, Associate Professor
Electrical & Computer Eng
PHD, University of Southern California, Los Angeles, 2014

Menon, Arya, Assistant Professor
Electrical & Computer Eng
PHD, Oregon State University, 2021

Michalski, Krzysztof A, Associate Professor
Electrical & Computer Eng
PHD, University of Kentucky, 1981

Miller, Scott L, Professor
Electrical & Computer Eng
PHD, University of California at San Diego, 1988

Moreira-Tamayo, Oscar, Professor of the Practice
Electrical & Computer Eng
PHD, Texas A&M University, 1996

Narayanan, Krishna R, Professor
Electrical & Computer Eng
PHD, Georgia Institute of Technology, 1998

Nevels, Robert D, Professor
Electrical & Computer Eng
PHD, University of Mississippi, 1979

Nounou, Hazem N, Professor
Electrical & Computer Eng
PHD, Ohio State University, 2000

Nowka, Kevin J., Professor Of The Practice
Electrical & Computer Eng
PHD, Stanford University, 1995

Overbye, Thomas J, Professor
Electrical & Computer Eng
PHD, University of Wisconsin, 1991

Palermo, Samuel M, Professor
Electrical & Computer Eng
PHD, Stanford University, 2007

Peebles, Joshua, Assistant Professor
Electrical & Computer Eng
PHD, University of Florida, 2022

Qaraqe, Khalid A, Professor
Electrical & Computer Eng
PHD, Texas A&M University, 1997

Qian, Xiaoning, Professor
Electrical & Computer Eng
PHD, Yale University, 2005

Rajendran, Jeyavijayan, Associate Professor
Electrical & Computer Eng
PHD, New York University, 2015

Rentzepis, Peter M, Professor
Electrical & Computer Eng
PHD, University of Cambridge, 1963

Righetti, Raffaella, Associate Professor
Electrical & Computer Eng
PHD, University of Houston, 2005

Roy, Sandip, Professor
Electrical & Computer Eng
PHD, Massachusetts Institute of Technology, 2003

Russell Jr, Billy D, Distinguished Professor and Regents Professor
Electrical & Computer Eng
PHD, University of Oklahoma, 1975

Savari, Serap A, Associate Professor
Electrical & Computer Eng
PHD, Massachusetts Inst of Technology, 1996

Serpedin, Erchin, Professor
Electrical & Computer Eng
PHD, University of Virginia, 1999

Serpedin, Erchin, Professor
Electrical & Computer Eng
PHD, University of Virginia, 1999

Shakkottai, Srinivas G, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2007

Shen, Yang, Associate Professor
Electrical & Computer Eng
PHD, Boston University, 2008

Shi, Weiping, Professor
Electrical & Computer Eng
PHD, University of Illinois, 1992

Silva-Martinez, Jose E, Professor
Electrical & Computer Eng
PHD, Katholieke Universiteit Leuven, 1992

Singh, Chanan, University Distinguished Professor and Regents Professor
Electrical & Computer Eng
PHD, University of Saskatchewan, 1972

Sprintson, Alexander, Professor
Electrical & Computer Eng
PHD, Israel Institute of Technology, 2003

Tian, Chao, Associate Professor
Electrical & Computer Eng
PHD, Cornell University, 2005

Toliyat, Hamid A, Professor
Electrical & Computer Eng
PHD, University of Wisconsin, Madison, 1991

Tyler Jr, John E, Senior Lecturer
Electrical & Computer Eng
MS, University of Central Texas, 1979

Watson, Karan L, Senior Professor
Electrical & Computer Eng
PHD, Texas Tech University, 1982

Weichold, Mark H, Regents Professor
Electrical & Computer Eng
PHD, Texas A&M University, 1983

Williams, Richard, Professor
Electrical & Computer Eng
PHD, University of California at Berkeley, 1978

Wright, Steven M, Professor
Electrical & Computer Eng
PHD, University of Illinois, 1984

Xie, Le, Professor
Electrical & Computer Eng
PHD, Carnegie Mellon University, 2009

Xiong, Zixiang, Professor
Electrical & Computer Eng
PHD, University of Illinois, 1996

Yi, Suin, Assistant Professor
Electrical & Computer Eng
PHD, Texas A&M University, 2017

Yoon, Byung-Jun, Professor
Electrical & Computer Eng
PHD, California Institute of Technology, 2007

Zhang, Xi, Professor
Electrical & Computer Eng
PHD, University of Michigan, 2002

Zilany, Muhammad Shamsul Arefeen, Instructional Assistant Professor
Electrical & Computer Eng
PHD, McMaster University, 2007

Zou, Jun, Professor
Electrical & Computer Eng
PHD, University of Illinois, 2002

Majors

- Bachelor of Science in Computer Engineering (<http://catalog.tamu.edu/undergraduate/engineering/electrical-computer/computer-engineering-bs/>)
- Bachelor of Science in Electrical Engineering (<http://catalog.tamu.edu/undergraduate/engineering/electrical-computer/electrical-bs/>)

Minors

- Electrical Engineering Minor (<http://catalog.tamu.edu/undergraduate/engineering/electrical-computer/electrical-minor/>)