DEPARTMENT OF ELECTRICAL & 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 systems. Laboratory work is structured to first familiarize the student with the basic concepts and then to apply these concepts to solve engineering problems.

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

Mission

Activities of the Electrical and Computer Engineering Department including research, teaching, and professional and community service revolve around the fourfold mission of the department:

• To create new knowledge and challenge young minds by participation in the process of discovery and invention
• To educate electrical and computer engineers with a solid background of fundamentals, stretching their imagination
• To prepare graduates for an exciting future
• To serve the society through research, education and outreach activities

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

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

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

Begovic, Miroslav M, Professor
Electrical & Computer Eng
PHD, Virginia Polytechnic Institute, 2014

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

Braga Neto, Ulisses, Associate 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

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, Assistant Professor
Electrical & Computer Eng
PHD, University of Illinois at Urbana-Champaign, 2011

Dougherty Jr, Edward R, Distinguished Professor
Electrical & Computer Eng
PHD, Rutgers State University of New Jersey, 1974

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

Eknoyan, Ohannes, Senior Professor
Electrical & Computer Eng
PHD, Columbia University, 1975

Enjeti, Prasad N, Professor
Electrical & Computer Eng
PHD, Concordia University, Montreal, 1984
Entesari, Kamran, Professor
Electrical & Computer Eng
PHD, University of Michigan, 2006

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

Gratz, Paul V, Associate Professor
Electrical & Computer Eng
PHD, University of Texas, 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

Heidarzadeh, Anoosheh, Visiting Assistant Professor
Electrical & Computer Eng
PHD, Carleton University, 2012

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

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

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

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

Huang, Garng M, Professor
Electrical & Computer Eng
PHD, Washington University in St. Louis, 1980

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

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

Kameoka, Jun, Professor
Electrical & Computer Eng
PHD, Cornell University, 2002

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

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

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

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

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

Li, Peng, Professor
Electrical & Computer Eng
PHD, Carnegie Mellon University, 2003

Lin, Paotai, Assistant 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, Associate 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, Assistant Professor
Electrical & Computer Eng
PHD, University of California at Berkeley, 2014

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

Miller, Scott L, Professor
Electrical & Computer Eng
PHD, University of California, 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

Nguyen, Cam Van, Professor
Electrical & Computer Eng
PHD, University of Central Florida, 1990
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, Associate Professor
Electrical & Computer Eng
PHD, Stanford University, 2007

Park, Hangue, Assistant Professor
Electrical & Computer Eng
PHD, Georgia Institute of Technology, 2017

Park, Sung I, Assistant Professor
Electrical & Computer Eng
PHD, Stanford University, 2014

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

Rahimian, Mina M, Senior Lecturer
Electrical & Computer Eng
PHD, Texas A&M University, 2011

Rajendran, Jeyavijayan, Assistant 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

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

Sanchez-Sinencio, Edgar, Distinguished Professor
Electrical & Computer Eng
PHD, University of Illinois, 1973

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

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

Shen, Yang, Assistant 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, 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

Villareal, Samuel S, Senior Lecturer
Electrical & Computer Eng
PHD, Texas A&M University, 1999

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

Weichold, Mark H, 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

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

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

**Majors**
- Bachelor of Science in Computer Engineering, Electrical Engineering Track  
  (http://catalog.tamu.edu/undergraduate/engineering/electrical-computer/computer-engineering-bs-electrical-engineering-track)
- 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)