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 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, 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

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

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, University 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

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

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

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

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

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

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

Li, Peng, Adjunct 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
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nowka, Kevin J.</td>
<td>Professor Of The Practice</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Stanford University</td>
<td>1995</td>
</tr>
<tr>
<td>Overbye, Thomas J.</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Wisconsin</td>
<td>1991</td>
</tr>
<tr>
<td>Palermo, Samuel M.</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Stanford University</td>
<td>2007</td>
</tr>
<tr>
<td>Park, Hangue</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Georgia Institute of Technology</td>
<td>2017</td>
</tr>
<tr>
<td>Park, Sung I.</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Stanford University</td>
<td>2014</td>
</tr>
<tr>
<td>Qian, Xiaoning</td>
<td>Associate Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Yale University</td>
<td>2005</td>
</tr>
<tr>
<td>Rahimian, Mina M.</td>
<td>Senior Lecturer</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Texas A&amp;M University</td>
<td>2011</td>
</tr>
<tr>
<td>Rajendran, Jeyavijayan</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, New York University</td>
<td>2015</td>
</tr>
<tr>
<td>Rentzepis, Peter M.</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Cambridge</td>
<td>1963</td>
</tr>
<tr>
<td>Righetti, Raffaella</td>
<td>Associate Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Houston</td>
<td>2005</td>
</tr>
<tr>
<td>Russell Jr, Billy D.</td>
<td>Distinguished Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Oklahoma</td>
<td>1975</td>
</tr>
<tr>
<td>Sanchez-Sinencio, Edgar</td>
<td>University Distinguished Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Illinois</td>
<td>1973</td>
</tr>
<tr>
<td>Savari, Serap A.</td>
<td>Associate Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Massachusetts Inst of Technology</td>
<td>1996</td>
</tr>
<tr>
<td>Serpedin, Erchin</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Virginia</td>
<td>1999</td>
</tr>
<tr>
<td>Shakkottai, Srinivas G.</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Illinois</td>
<td>2007</td>
</tr>
<tr>
<td>Shen, Yang</td>
<td>Assistant Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Boston University</td>
<td>2008</td>
</tr>
<tr>
<td>Shi, Weiping</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Illinois</td>
<td>1992</td>
</tr>
<tr>
<td>Silva-Martinez, Jose E</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Katholieke Universiteit Leuven</td>
<td>1992</td>
</tr>
<tr>
<td>Singh, Chanan</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Saskatchewan</td>
<td>1972</td>
</tr>
<tr>
<td>Sprintson, Alexander</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Israel Institute of Technology</td>
<td>2003</td>
</tr>
<tr>
<td>Tian, Chao</td>
<td>Associate Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Cornell University</td>
<td>2005</td>
</tr>
<tr>
<td>Toliyat, Hamid A</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Wisconsin - Madison</td>
<td>1991</td>
</tr>
<tr>
<td>Tyler Jr, John E</td>
<td>Senior Lecturer</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>MS, University of Central Texas</td>
<td>1979</td>
</tr>
<tr>
<td>Villareal, Samuel S</td>
<td>Senior Lecturer</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Texas A&amp;M University</td>
<td>1999</td>
</tr>
<tr>
<td>Watson, Karan L</td>
<td>Senior Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Texas Tech University</td>
<td>1982</td>
</tr>
<tr>
<td>Weichold, Mark H</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Texas A&amp;M University</td>
<td>1983</td>
</tr>
<tr>
<td>Williams, Richard</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of California at Berkeley</td>
<td>1978</td>
</tr>
<tr>
<td>Wright, Steven M</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Illinois</td>
<td>1984</td>
</tr>
<tr>
<td>Xie, Le</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, Carnegie Mellon University</td>
<td>2009</td>
</tr>
<tr>
<td>Xiong, Zixiang</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Illinois</td>
<td>1996</td>
</tr>
<tr>
<td>Yoon, Byung-Jun</td>
<td>Associate Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, California Institute of Technology</td>
<td>2007</td>
</tr>
<tr>
<td>Zhang, Xi</td>
<td>Professor</td>
<td>Electrical &amp; Computer Eng</td>
</tr>
<tr>
<td></td>
<td>PHD, University of Michigan</td>
<td>2002</td>
</tr>
</tbody>
</table>
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/)