

# DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

[www.ece.tamu.edu](http://www.ece.tamu.edu) (<http://www.ece.tamu.edu>)

**Head:** N. Annapareddy

**Graduate Advisor:** J. Hu

The Department of Electrical and Computer Engineering offers programs for graduate study leading to the research-oriented Master of Science and Doctor of Philosophy degrees and to the professional Master of Science non-thesis degree in Electrical and Computer Engineering. Courses in the department may also be applied to the interdisciplinary Doctor of Engineering degree. The MS and PhD programs provide specialization in-depth and include a research (thesis or dissertation) requirement. The MS non-thesis and DEng programs are designed to provide the depth and breadth necessary for the practice of engineering at advanced levels.

Current areas of study include analog and mixed signal, biomedical imaging and genomic signal processing, computer engineering, electromagnetic and microwaves, electric power and power electronics, solid state electronics, photonics and nano-engineering, telecommunications, signal processing and controls. Interdisciplinary engineering programs are available in other areas.

Well equipped laboratories are available for work in all of these areas. Special laboratory facilities are available to graduate students in telecommunications, solid-state electronics, integrated circuit design, electromagnetics, microwave microelectronics, electrotropics, computer vision and electric power systems. The department has many workstations and high end PCs in general access laboratories and excellent computing facilities available in the individual research laboratories. The workstations are supported by a large Sun file servers and two computational servers, and the PCs are supported by a Novell network.

There is no foreign language requirement for the PhD or DEng programs in electrical and computer engineering.

## Faculty

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

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

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

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

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

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

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

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

Chamberland, 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, 1988

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

Gong, Jiarui, Assistant Professor  
Electrical & Computer Eng  
PHD, University of Wisconsin-Madison, 2022

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

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

Ji, Jim, Professor  
Electrical & Computer Eng-Qatar Campus  
PHD, University of Illinois at Urbana-Champaign, 2003

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

Johnson, Matthew Christopher, Instructional Assistant Professor  
Electrical & Computer Eng  
PHD, Texas A&M University, 2017

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 P B, Professor  
Electrical & Computer Eng  
PHD, University of California, Los Angeles, 1984

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

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

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

Koohi, Milad, Assistant Professor  
Electrical & Computer Eng  
PHD, University of Michigan, 2020

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

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 David, 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

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-Madison, 1991



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

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

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, B. Don, Distinguished 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-Qatar Campus  
PHD, University of Virginia, 1999

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

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

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

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

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

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

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

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

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

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

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

Xiong, Zixiang, Professor  
Electrical & Computer Eng  
PHD, University of Illinois Urbana-Champaign, 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, Han, Research Assistant Professor  
Electrical & Computer Eng  
PHD, Utah State University, 2019

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

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

## Masters

- Master of Engineering in Computer Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/computer-meng/>)
- Master of Engineering in Electrical Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/electrical-meng/>)
- Master of Science in Computer Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/computer-ms/>)
- Master of Science in Electrical Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/electrical-ms/>)
- Master of Science in Microelectronics and Semiconductors (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/>)



engineering/electrical-computer/microelectronics-semiconductors-  
ms/)

## Doctoral

- Doctor of Philosophy in Computer Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/computer-phd/>)
- Doctor of Philosophy in Electrical Engineering (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/electrical-phd/>)

## Certificates

- Analog and Mixed-Signal Integrated Circuit Design Certificate (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/analog-and-mixed-signal-integrated-circuit-design-certificate/>)
- Digital Integrated Circuit Design Certificate (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/digital-integrated-circuit-design-certificate/>)
- Electromagnetic Fields and Microwave Circuit Design Certificate (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/electromagnetic-fields-microwave-circuit-design-certificate/>)
- Semiconductor Manufacturing Certificate (<https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/engineering/electrical-computer/semiconductor-manufacturing-certificate/>)