



COLLEGE OF ENGINEERING

Electrical & Computer Engineering

GRADUATE STUDIES

Harnessing the entrepreneurial spirit



Researchers patent inventions by the dozens every year and create startups to market their products.

RESEARCH FOCUS AREAS

- Autonomous systems and robotics
- Biomedical technologies
- Circuits, microelectronics and very-large-scale integration
- Communications, coding and information theory
- Computer architecture and cloud/distributed computing
- Optics, photonics and terahertz devices and systems
- Signal, image and video processing
- Software engineering and embedded systems
- Wireless networking, security and systems

CENTERS & INSTITUTES

- Arizona Research Institute for Solar Energy
- Broadband Wireless Access Center
- Center for Quantum Networks
- Center to Stream Healthcare In Place
- Cloud and Autonomic Computing Center

JOB PLACEMENT

- Amazon
- Apple
- IBM
- Intel
- Microsoft
- Qualcomm
- Raytheon Technologies
- Texas Instruments

TOP 20%

electrical engineering graduate programs

(U.S. News & World Report, 2022 Public School Rank)

TOP 25%

computer engineering graduate programs



“ You get to be a part of the research. It’s not just something you take part in. You get to own your piece of it. ”

- Ian Patrick Armstrong, ECE BS and MS graduate



DEGREES

PhD and MS
(online MS option)

APPLICATION DEADLINES

- Fall: December 15
- Spring: July 15

CONTACTS

On-Campus

Tosiron Adegbija, Director of Graduate Studies
tosiron@arizona.edu • 520.621.3291

Online

Jeffrey J. Rodriguez, Director of Online Programs
jjrodrig@arizona.edu • 520.621.8732

Tami Whelan, Graduate Academic Advisor
gradadvisor@ece.arizona.edu • twhelan@arizona.edu
520.621.6195



“ This department has a great balance of both the freedom associated with purely academic pursuits and the entrepreneurship that is needed for applied work. ”

- Boulat Bash, assistant professor



Faculty Expertise

Tosiron Adegbija – tosiron@arizona.edu

high-performance embedded computing • low-power embedded systems design

Ali Akoglu – akoglu@arizona.edu

high-performance computing • reconfigurable computing • adaptive hardware systems

Ehsan Azimi – eazimi@arizona.edu

medical robotics • augmented reality • human computer interaction • immersive learning control

Boulat Bash – boulat@arizona.edu

applying information theory to practical problems of reliability and security

Ali Bilgin – bilgin@arizona.edu

signal and image processing • data compression • magnetic resonance imaging

Siyang Cao – caos@arizona.edu

radar signal processing • adaptive radar systems • innovative sensing systems

Ivan B. Djordjevic – dvorak@arizona.edu

optical communications and networks • quantum information processing

Steven L. Dvorak – sldvorak@arizona.edu

geophysical applications of electromagnetics • optics • applied mathematics

Wolfgang Fink – wfink@arizona.edu

artificial vision • autonomous robotic space exploration • biomedical sensors

Christos Gagatsos – cgagatsos@arizona.edu

communications • computing • quantum and classical sensing

Salim Hariri – hariri@arizona.edu

autonomic cybersecurity • big data analytics • resilient cloud services

Dale Hetherington – daleheterington@arizona.edu

electronic circuits • embedded microcontrollers • semiconductor processing

Raymond Kostuk – kostuk@arizona.edu

optics • photonics

Marwan Krunz – krunz@arizona.edu

wireless networks • cognitive and software-defined radios • MIMO communications

Loukas Lazos – llazos@arizona.edu

network security • algorithms • network optimization • wireless communications

Eung-Joo Lee – eungjoolee@arizona.edu

computer vision • signal and image processing • medical image analysis • machine learning • embedded systems

Ming Li – lim@arizona.edu

information security and privacy • wireless networking • cybersecurity

Abhijit Mahalanobis – amahalan@arizona.edu

novel imaging systems • machine vision and pattern recognition systems • infrared and RF automatic target recognition

Michael W. Marcellin – mwm@arizona.edu

digital communication and data storage systems • data compression • signal processing

Michael M. Marefat – marefat@arizona.edu

intelligent systems • computer vision and robotics • machine learning

Kathleen Melde – melde@arizona.edu

antennas for computing • wildlife tracking • microwave circuit design

Kelly Potter – kspotter@arizona.edu

response of optical materials and devices to ionizing and non-ionizing radiation

Narayanan Rengaswamy – narayananr@arizona.edu

classical and quantum error correction, quantum computing, quantum networking, quantum communications

Jeffrey J. Rodriguez – jjrodrig@arizona.edu

signal-image-video processing and analysis • automated image analysis

Janet Meiling Roveda – meilingw@arizona.edu

smart grid and smart home • VLSI systems for biomedical applications • multicore design

Jerzy W. Rozenblit – jerzy.rozenblit@arizona.edu

design and analysis of complex systems • modeling and computer simulation

Soheil Salehi – ssalehi@arizona.edu

security, signal conversion and processing in IoT • neuromorphic and biologically-inspired AI hardware, emerging spin-based devices • computer architectures • VLSI circuits

Ravi Tandon – tandonr@arizona.edu

information and coding theory • wireless communications • machine learning

Ratchaneekorn “Kay” Thamvichai – rthamvichai@arizona.edu

digital signal processing • communications

Hal S. Tharp – tharp@arizona.edu

control theory • engineering education

Bane Vasic – vasic@arizona.edu

coding theory • information theory • digital communications • memory and storage systems

Michael Wu – mhwu@arizona.edu

cybersecurity, mobile computing, wireless networks, computer communications

Hao Xin – hxin@arizona.edu

microwave • millimeter-wave and THz devices • circuits • antennas

Danella Zhao – danellazhao@arizona.edu

domain-specific computing, hardware security and privacy-preserving edge computing, autonomic computing, quantum computing