



THE UNIVERSITY OF TEXAS AT EL PASO ELECTRICAL & COMPUTER ENGINEERING

UTEP ECE DEPARTMENT PROFILE

The Department of Electrical and Computer Engineering at The University of Texas at El Paso (UTEP) offers a Bachelor of Science in Electrical Engineering, Master of Science degrees in Electrical Engineering and in Computer Engineering, and a Ph.D. degree in Electrical and Computer Engineering. The University of Texas at El Paso (UTEP) began graduating students with the BSEE in 1949. The program is accredited by ABET since 1965. The Master of Science programs in Electrical Engineering and in Computer Engineering were first offered in 1966 and 1980 respectively. The Ph.D. program started in 1990 and is the second oldest doctoral program at UTEP.

THE MISSION OF THE UTEP ECE DEPARTMENT IS TO:

- Dedicate itself to providing its students with the skills, knowledge and attitudes that will allow its graduates to succeed as engineers and leaders.
- Maintain a vital, state-of-the art research enterprise, which provides its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
- Prepare its graduates for life-long learning to meet intellectual, ethical and career challenges.
- Recognize and act upon the special mandate to make high quality engineering education available to the residents of El Paso and the surrounding region.

In Fall 2020, 556 Undergraduates, 51 Master, and 29 Ph.D. students were enrolled in the department. The ECE Department has a student population composition that is very similar to the overall composition of the University and El Paso, with 82% of its undergraduate students of Hispanic origin. At the graduate level, 71% of the Master and 52% of the Ph.D. students are Hispanics. In the 2019-2020 academic year, 109 Undergraduate, 18 Master and 7 Ph.D. degrees were awarded.

Students in the undergraduate program can choose one of six options or concentrations (areas of specialization):

- Signal Processing, Systems and Communications
- Fields, and Devices
- Computer Engineering
- Biomedical Engineering
- Power and Energy Systems
- General Electrical Engineering



\$2.5M
RESEARCH EXPENDITURES



636
STUDENTS
ENROLLED IN
FALL 2020



20
FACULTY
MEMBERS

Similar specialization options are available to students at the graduate level. The Department offers a Fast-Track Dual-Credit Program that enables outstanding undergraduate EE students to receive dual undergraduate and graduate credit for up to 15 hours of UTEP graduate course work that count towards the Master or Ph.D. programs.

The ECE Faculty is composed of 17 Tenured/Tenure-Track and 3 Non-Tenure-Track Faculty Members and 3 Lecturers. We are proud of the diversity of our faculty, which includes 4 women in T/TT positions and 2 women as Lecturers, as well as 10 Hispanics and 2 African American faculty members. Our faculty has earned international recognition for their achievement in education, research and service. The ECE Faculty includes 4 Fellows of Technical Societies (SPIE, AIMBE, and the Institute of Measurement and Control), 1 recipient of the Presidential Early Career Award for Scientists and Engineers, 1 DARPA Young Investigator Award Recipient, 1 MAES National Outstanding MAESTro, 1 recipient of the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentorship, and 2 IEEE Third Millennium Medal recipients.

The ECE Department research expenditures average \$2.5M per year. ECE research is funded by federal, state, and industrial sources. Key areas of ECE Faculty expertise include: (i) additive manufacturing to enable novel electric, electronic and electromagnetic devices and systems; (ii) materials and devices; (iii) electromagnetic and photonics; (iv) data analytics, machine learning and signal processing; (v) cyberphysical systems; (vi) biomedical engineering; and (vi) electric power and energy systems. ECE faculty are partners in the Center for Energy Efficient Electronics Science (E3S) a NSF Science and Technology Center, the Advancing Sustainability through Powered Infrastructure for Roadway Electrification (ASPIRE) NSF Engineering Research Center, and the NOAA Cooperative Science Center in Earth System Science and Remote Sensing Technology (CESSRST).

MORE INFORMATION ABOUT THE UTEP ECE DEPARTMENT IS FOUND IN OUR WEBSITE AT:
<http://ece.utep.edu>

Department Chair Dr. Miguel Velez-Reyes: mvelezreyes@utep.edu | (915) 747-5534

The UTEP ECE front desk can be contacted by email at ecefrontdesk@utep.edu or by calling (915) 747-5470