

Search for the Chair of the Department of Electrical Engineering
The University of Texas at Arlington, College of Engineering
Arlington, TX

The University of Texas at Arlington (UTA) invites nominations and applications for the Chair of the Department of Electrical Engineering. This presents an exciting opportunity to join UTA at a pivotal time, as the University pursues ambitious goals under the leadership of President Jennifer Cowley and Provost Tamara L. Brown.

Over the last few decades, UTA has experienced remarkable growth, with a student enrollment exceeding 41,000, nearly 4,000 faculty and staff members, and research expenditures reaching \$125 million in 2022. One of only 19 universities in the United States with both a Carnegie Research-1 status and Hispanic-Serving Institution designation, UTA stands out as a model for the 21st-century urban research university. Situated in the vibrant Dallas-Fort Worth metropolitan area, UTA offers abundant opportunities for industry partnerships due to its proximity to a high concentration of corporate headquarters. Guided by the new Recruiting Innovative Scholars for Excellence (RISE) 100 Initiative, the University aims to amplify its research success and strives to secure membership in the prestigious Association of American Universities (AAU).

The College of Engineering, established in 1959, plays a pivotal role in UTA's growth. Offering 12 baccalaureate, 13 master's, and nine doctoral degree programs, the College is a powerhouse with nearly 10,000 students and 217 faculty, including three National Academy of Engineering members, 13 National Academy of Inventors fellows, and ten current NSF CAREER winners. In 2022, the College's annual research expenditures exceeded \$47.2 million, contributing over a third of the University's total research funding. The Department of Electrical Engineering, integral to the College's success, demonstrates its commitment to academic excellence through increased research productivity and innovative program development, including the launch of a first-of-its-kind bachelor's degree in Resource and Energy Engineering in the fall of 2023.

Joining the College of Engineering at a time of growth, the next Chair will have the opportunity to inspire and lead the Department of Electrical Engineering into the next phase of excellence. Reporting to the Dean, the Chair will be an experienced leader with a strong record of scholarship, a dedication to high-quality teaching and research, and a forward-thinking vision that reflects the needs of faculty, staff,

students, and the region. Qualified candidates for this role will be considered for the Alfred R. and Janet H. Potvin Chair in Electrical Engineering.

The Chair will be expected to address the following key opportunities and challenges:

- Chart a vision for the Department's continuous growth and distinction
- Elevate research excellence in alignment with UTA's ambition
- Cultivate a collaborative, transparent, and supportive culture
- Increase graduate enrollment and enhance student success
- Strengthen industry connections for regional impact

A list of the desired qualifications and characteristics of the Chair of the Department of Electrical Engineering can be found at the conclusion of this document, which was prepared by the search committee with the assistance of Isaacson, Miller, a national executive search firm, to provide background information and detail the key opportunities and challenges related to the position. All confidential applications, inquiries, and nominations should be directed to the parties listed at the conclusion of this document.

THE UNIVERSITY OF TEXAS AT ARLINGTON

Founded in 1895, the University of Texas at Arlington has evolved as a national and state leader in higher education with a focus on access, excellence, and global impact. The University enrolls more than 41,000 students in campus-based and online degree programs and offers more than 184 bachelor's, master's, and doctoral degrees in a broad range of disciplines. More than 60% of the University's 250,000 alumni live in North Texas and contribute to an annual economic impact of \$17.1 billion in the region.

As one of the largest universities in Texas, UTA has the fifth most ethnically diverse undergraduate population in the United States. This year, UTA is one of six institutions nationwide to earn the Seal of Excelencia certification, a prestigious honor granted to colleges and universities for their commitment to accelerating Latino student success. The University graduates the most African American students at the master's degree level and the second-most at the undergraduate level of any other Texas university. UTA also stands out as a top choice for Indigenous students, chosen by the American Indian Science and Engineering Society. The University is consistently ranked as a top institution serving first-generation, low-income students and veterans, as recognized by *Military Times*.

With a commitment to accessibility, the University launched the <u>Blaze Forward</u> program in 2022, covering 100% of tuition and mandatory fees for eligible undergraduate students from families with adjusted gross incomes up to \$85,000.

At the helm of UTA is President <u>Jennifer Cowley</u>, the first woman to hold this position, supported by Provost <u>Tamara L. Brown</u>. Both leaders joined the University in 2022 and are actively leading the multi-

phase development of a comprehensive five-year <u>strategic plan</u> focusing on people and culture, student success, alumni and community engagement, research and innovation, and finance and infrastructure.

For more information about the University of Texas at Arlington, visit https://www.uta.edu/

THE COLLEGE OF ENGINEERING

The College of Engineering provides comprehensive engineering programs in seven academic departments including Bioengineering; Civil Engineering; Computer Science and Engineering; Electrical Engineering; Industrial, Manufacturing, and Systems Engineering; Materials Science and Engineering; and Mechanical and Aerospace Engineering. Among the academic departments, there are 12 baccalaureate, 13 master's, nine doctoral degrees, and 10 minors offered. *U.S. News & World Report* ranks the College #105 in Best Undergraduate Engineering Programs and #69 in Best Engineering Schools for graduate programs. The College maintains its voluntary ABET accreditation status with programs being accredited by the Engineering Accreditation Commission, Computing Accreditation Commission, and the Applied and Natural Science Accreditation Commission.

Over the years, the College has experienced a consistent increase in student enrollment, which has positively coincided with the College's growth in research opportunities, curriculum development, and industry partnerships. In Fall 2023, the College welcomed a total of 9,953 total students, including 5,971 undergraduates, 3,426 master's students, and 540 doctoral students. 43% of its student body comprises international students from 66 countries, 41% representing students of color, and 26% being women. The College is home to 217 faculty, of which 159 hold tenured or tenure-track appointments. Faculty actively contribute to impactful research in various fields, including data analytics, photonics, healthcare, energy, and built infrastructure.

The College is led by Dr. <u>Peter Crouch</u>, who was appointed as Dean and professor of electrical engineering in 2016. Since arriving, he has pursued vigorous support for the President's strategic vision for UTA, and the powerful growth of the University and the College. Developing the strategic links between the College and its stakeholders, especially in the DFW metro area, is one of his most important goals. A native of England, Dr. Crouch earned both his bachelor's degree in engineering science and master's degree in control theory from Warwick University in Coventry, and his PhD in applied sciences from Harvard University.

To learn more about the College of Engineering, visit https://www.uta.edu/academics/schools-colleges/engineering

THE DEPARTMENT OF ELECTRICAL ENGINEERING

One of seven departments in the College of Engineering, the Department of Electrical Engineering provides students with opportunities to broaden and deepen their knowledge in several areas of electrical

engineering. The Department offers the degrees of Bachelor of Science (BS), Master of Science (MS), Master of Engineering (M.Engr), a fast-track program to a MS degree for undergraduate students, a PhD in Electrical Engineering, and a certificate in Unmanned Vehicle Systems. The Department is well-known for its research in energy storage and delivery, microgrids, photonics in the areas of sensors, healthcare, and secure communication. The Electrical Engineering graduate program has moved up in its ranking in recent years, currently ranked #76 by *U.S. News and World Report*.

The Department enrolls 618 students (440 undergraduate and 178 graduate) and encourages students to participate in hands-on learning experiences with junior and senior design courses sponsored by industry partners to focus on solving real-world problems and opportunities to work alongside faculty on research funded by the College. More than half of the Department's students complete a co-op or internship to gain practical work experience prior to graduation. Many of the Department's graduates are hired by companies they intern with, including renowned companies in the Dallas-Fort Worth region such as Lockheed Martin, Oncor, Raytheon, American Airlines, Atmos Energy, and Baird, Hamilton and Brown.

The Department currently has 25 tenured/tenure track faculty members and 7 non-tenured faculty. Faculty include a member of the National Academy of Engineering, ten IEEE fellows, six OSA fellows, and four SPIE fellows, as well as awardees of numerous prestigious research programs with two NSF CAREER, one Department of Energy Early Career, and two Office of Naval Research Young Investigator Program recipients. With annual research expenditures exceeding \$6.4 million and over 50 grants awarded in fiscal year 2023, faculty members are engaged in state-of-the-art research in power and energy, cyberphysical and control learning systems, photonics, sensors and internet of things, signal processing and machine learning.

To learn more about the Department, visit https://www.uta.edu/academics/schools-colleges/engineering/academics/departments/electrical

Current Context

Over the past few years, the Department has grown in its ranking, a response to the University's concerted efforts to boost research productivity and address local and regional needs in electrical engineering. These developments include comprehensive curriculum updates aimed at maintaining high standards and preparing students for post-graduate opportunities, the expansion of partnerships with the local and regional industry, and the creation of endowed scholarships to support both undergraduate and graduate students.

The Department achieved a significant milestone in the fall of 2023 with the launch of the nation's first Resource and Energy Engineering (REE) program. Made possible through the largest single philanthropic investment in the University history—a \$12 million gift from alumnus Kelcy Warren, UT System Board of Regent member and executive chairman and chairman of the Board of Directors of Energy Transfer LP—

the funding is fueling faculty and research excellence while providing students with life-changing opportunities for educational and career success in REE and beyond.

Looking forward, the Department is in the process of hiring two assistant professors and is actively preparing for the ABET re-accreditation visit scheduled for the fall of 2024. As UTA is planning to recruit 100 tenure-system faculty under the RISE 100 initiative, the new Chair will have an opportunity to advocate for new faculty lines to further amplify research productivity and academic excellence, propelling the Department's trajectory of success.

ROLE OF THE CHAIR OF THE DEPARTMENT OF ELECTRICAL ENGINEERING

The Chair of the Department of Electrical Engineering serves as the chief executive, academic, and administrative officer of the Department and reports to the Dean of the College of Engineering. The next Chair will build on the momentum of excellence at UTA to move the Department forward, enhancing its impact in the College and beyond. The Chair will oversee the Department's faculty, a support staff of 11 professionals, and a combined state, tuition, and research budget of about \$7 million annually.

KEY OPPORTUNITIES AND CHALLENGES FOR THE CHAIR

Chart a vision for the Department's continuous growth and distinction

Building on a momentum marked by enhanced research productivity, rising ranking, and faculty additions, the new Chair of the Department of Electrical Engineering will provide guidance and leadership to continue elevating the Department's academic and research standing, particularly the opportunities provided by the new Resource and Energy Engineering program for industry collaboration and growth at the current undergraduate level, and potentially, the graduate level. Collaborating with the Dean, faculty, staff, and students, the Chair will craft a compelling vision for the Department that will identify and amplify its unique strengths, with a strategic focus on enrollment growth, student success, research productivity, and external partnerships.

Elevate research excellence in alignment with UTA's ambition

With established research focus areas and a new degree program, the Department is poised for growth. The next Chair, in alignment with UTA's bold <u>RISE 100</u> initiative, will lead efforts to expand the Department's research productivity. This includes encouraging faculty to assume thought leadership roles in their areas of expertise, championing faculty recruitment and retention, and working closely with the Dean to secure additional resources and physical space. To be effective in this pursuit, the Chair will recognize the need for resource-sharing and cross-disciplinary collaboration across departments.

Cultivate a collaborative, transparent, and supportive culture

The Chair, as an accessible leader and relationship builder, will champion open communication and professional development opportunities for faculty and staff. The Chair will foster a vibrant, strong, and healthy culture, which is essential to inspire everyone to work together towards common goals. The Chair's commitment to a collegial environment, coupled with their ethics and transparency, will set the tone for a united and motivated team.

Increase graduate enrollment and enhance student success

Given the significant growth in undergraduate enrollment within the College of Engineering, strategic enrollment planning for the Department of Electrical Engineering is imperative, particularly at the graduate levels. In collaboration with the Dean, the Chair will develop targeted student recruitment and retention strategies, leveraging UTA's unique position as a Hispanic-Serving institution and Asian American Native American Pacific Islander-Serving institution. As part of this effort, the Chair will articulate the value and versatility of an electrical engineering degree and forge external partnerships to enhance post-graduate opportunities. Balancing enrollment growth with robust student support, the Chair will work closely with faculty and staff to promote an educational environment that ensures student success.

Strengthen industry connections for regional impact

As the Department's ambassador, the Chair plays a crucial role in strengthening ties with local and regional industry partners. Working in tandem with the Dean, the Chair will identify opportunities for partnerships, bringing new resources to the Department. This includes fostering industry-sponsored research, creating scholarships, and facilitating student internships, mentorship, and career placements. Through these efforts, the Chair will elevate the Department's visibility and contribute to the region's workforce and economic growth.

QUALIFICATIONS AND CHARACTERISTICS

While no single candidate will meet all the ideal qualifications, the successful candidate will bring many of the following qualifications and abilities:

- An earned PhD in electrical engineering or a related field and teaching, research, and scholarly accomplishments commensurate with the rank of full professor with tenure;
- A distinguished record of scholarly research, with high levels of recognition for technical contributions and leadership in the area(s) of expertise;
- Experience building collaborations with others across disciplines;
- Ability to cultivate relationships with industry partners and federal funders;
- Strong listening and facilitation skills and ability to define and execute a strategic vision;

- A commitment to support a high-quality learning environment that is dedicated to student success;
- An understanding of the importance of, and demonstrated success in, promoting inclusive excellence among faculty, staff, and students;
- An ability to champion, empower, and inspire staff and faculty;
- Experience driving enrollment and recruitment efforts;
- Experience guiding and encouraging research activities;
- Experience with budgetary and personnel matters;
- Exceptional organizational, interpersonal, written, and oral communication skills.

LOCATION

Located in the fourth-largest metropolitan area in the United States, the city of Arlington is a locus of progress between Dallas and Fort Worth in a region that is home to more than 7.6 million residents. The city's central location offers excellent cultural, recreation and entertainment opportunities, and is home to three professional sports teams: the 2023 World Series champion Texas Rangers, the Dallas Cowboys, and the Dallas Wings. The DFW area boasts a vibrant music scene, with the Cowboys' AT&T Stadium regularly hosting concerts and other major events. The city provides easy access to two major airports, Dallas/Fort Worth International Airport and Dallas Love Field.

APPLICATIONS, INQUIRIES, AND NOMINATIONS

Screening of complete applications will begin immediately and continue until the completion of the search process. Inquiries, nominations, referrals, and CVs with cover letters should be sent via the Isaacson, Miller website for the search: https://www.imsearch.com/open-searches/university-texas-arlington-college-engineering/chair-department-electrical. Electronic submission of materials is strongly encouraged.

Cati Mitchell-Crossley, Phuong Ta, Luciano Zuniga, and Kati O'Hearn
Isaacson, Miller
1000 Sansome Street, Suite 300
San Francisco, CA 94111

UTA is an equal employment and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation, gender identity or expression, genetic information, marital status, national origin, disability status, or protected veteran status.