



THE UNIVERSITY OF TEXAS AT EL PASO

AEROSPACE AND MECHANICAL ENGINEERING

Assistant Professors of Aerospace Engineering Aerodynamics and Propulsion

Department of Aerospace and Mechanical Engineering The University of Texas at El Paso

The Department of Aerospace and Mechanical Engineering at the University of Texas at El Paso is pleased to invite applications for two tenure-track positions in aerospace engineering at an Assistant level starting Fall 2023. The department will consider applications in two general areas but applicants outside these areas are also encouraged to apply.

AERODYNAMICS including but not limited to: fluid and flight mechanics, high speed flights, compressible flow, boundary layer instability, heat transfer, and viscous flow fields, high temperature gas dynamics, plasma aerodynamics, non-equilibrium and rarefied gas dynamics, flow structure interactions, low-gravity fluid dynamics, advanced diagnosis systems, computational fluid dynamics, aerothermochemistry.

PROPULSION including but not limited to: air-breathing engines, solid rocket motors, liquid rocket engines, new propulsion areas including nuclear, battery, hybrid, fuel cell and green propulsion technologies, fluid dynamics, internal flow gas dynamics, turbulence and turbulent mixing, large-scale high-performance computing.

REQUIRED QUALIFICATIONS: A Ph.D. in Mechanical Engineering, Aerospace Engineering, or a closely related discipline is required. Successful candidates will demonstrate a commitment to teaching and mentoring undergraduate and graduate students and the potential for developing an externally funded research program.

ABOUT THE DEPARTMENT OF AEROSPACE AND MECHANICAL ENGINEERING:

The Department of Aerospace and Mechanical Engineering offers an ABET-accredited B.S. degree in Aerospace Engineering and Mechanical Engineering, and M.S. and Ph.D. degrees in Mechanical Engineering. The Department of Aerospace and Mechanical Engineering also offers a Graduate Certificate in 3D Engineering and Additive Manufacturing and is currently developing a proposal to offer an M.S. degree and an undergraduate concentration in Aerospace and Defense Systems Engineering. The Department of Aerospace and Mechanical Engineering has 1200 undergraduate students, and graduates typically 200 undergraduates a year, making it one of the top awarders of mechanical engineering bachelor's degrees in the country. The Aerospace and Mechanical Engineering Department's Graduate Program has 130 graduate students, including 60 doctoral students; nearly all graduate students are full-time and research active. Both graduate and undergraduate programs see an approximate 7% growth rate annually. The Department of Aerospace and Mechanical Engineering has annual research expenditures in excess of \$10 million, making it one of the top producing departments in the University from both a research and educational impact.

The Department of Aerospace and Mechanical Engineering (AME) partners with the Aerospace Center who operates several relevant research facilities including: (1) a 2500 sq. ft. **Spacecraft Design and Engineering Facility** (2) a 15 sq. mile **Technology Research and Innovation Acceleration Park** in Fabens, TX (35 miles from the UTEP main campus) dedicated to rocket engine testing, demonstration vehicle testing and integration, and autonomous vehicle testing with an adjacent non-towered airport, and (3) the **Tornillo Unmanned Aerial Systems Flight Test Range** with 3000 ft runway and 1/4 mi UAS track. The AME Department also partners with the **W.M. Keck Center for 3D Innovation** which is a world leader in the development and application of all major additive manufacturing processes. Additional information about the Department and College is available at <http://me.utep.edu> and <http://engineering.utep.edu>.

ABOUT UTEP & EL PASO: Set against the backdrop of the Franklin Mountains in the Chihuahuan Desert, The University of Texas at El Paso is located along the U.S.-Mexico border in one of the world's largest binational communities.

UTEP's award-winning, sustainably designed campus landscape and unique Bhutanese architecture create an energizing and tranquil oasis in the bustling El Paso-Juárez metroplex of more than 2 million residents. El Paso is a highly livable, bicultural community of more than 800,000 people that offers affordable homes and attractive neighborhoods. It has been repeatedly named among the safest

large U.S. cities and is one of the largest bilingual, binational, multicultural communities in the Western Hemisphere.

El Paso experiences almost 300 days of sunshine annually, and residents enjoy outdoor activities year-round. The City of El Paso is adjacent to the state of New Mexico and the country of Mexico, making it an ideal venue for academic programs and research studies on topics of national interest, such as bilingual education/language acquisition, border environment and immigration, environmental sustainability and infrastructure, health disparities, and international trade and commerce.

RANK & SALARY: Salary will commensurate with qualifications and experience.

APPLICATION PROCEDURE: Review of applications will begin immediately and will continue until the positions are filled. Anticipated appointment date is Fall 2023. Applicants must submit 1) a cover letter, 2) detailed curriculum vitae, 3) names of at least three references, 4) a statement of teaching philosophy 5) a statement of contributions to diversity, equity, inclusion, and accessibility, and 6) a statement of research interests pertinent to the position.

To apply, please visit <http://utep.edu/employment>.

Hiring decisions are based on budget approval.

In keeping with its Access and Excellence mission, the University of Texas at El Paso is committed to an open, diverse, and inclusive learning and working environment that honors the talents, respects the differences, and nurtures the growth and development of all. We seek to attract faculty and staff who share our commitment.

The University of Texas at El Paso is an Equal Opportunity / Affirmative Action Employer. The University does not discriminate on the basis of race, color, national origin, sex, religion, age, disability, genetic information, veteran status, or sexual orientation and gender in employment or the provision of services in accordance with state and federal law. Discrimination on the basis of sex includes an employee's or prospective employee's right to be free from sexual harassment under Title IX of the Higher Education Amendments of 1972.