TEXAS A&M INTERNATIONAL UNIVERSITY

A Member of The Texas A&M University System

School of Engineering

Assistant/Associate Professor of Systems Engineering (Three Positions)

The School of Engineering (SOEN) at Texas A&M International University (TAMIU) seeks to hire three tenure-track Assistant Professors (with the possibility of one of the positions being at the Associate Professor level) with a start date of Fall 2024. SOEN is looking for exceptional candidates who aim to establish themselves in academia by being part of an ambitious and visionary project that aims to position itself as a beacon of innovation in the South Texas region and beyond. SOEN recently received multimillion dollar federal funding to help launch a transformational multidisciplinary graduate program in Systems Engineering with two concertation areas: analytics and automation. TAMIU is undertaking a strategic faculty hiring initiative to bolster its SOEN faculty ranks in preparation for the launch of the graduate program, which is tentatively planned for Fall 2025. Assistant Professors at TAMIU receive a reduced load (2-2 for the first two years) to allow for publishing research and applying for external grant funding. Those hired at the Associate Professor level can have a reduced teaching load if they are highly research productive. This position requires face-to-face interactions through a regular schedule of attendance on campus and in the workplace. SOEN is searching for candidates who have a robust commitment to establishing a multidisciplinary research program, adopting a hands-on engineering education philosophy in teaching that emphasizes workplace and further graduate studies readiness, relentless mentoring of students working on their master's theses and/or senior design projects, and becoming academic and professional service role models for their peers and students.

Texas A&M International University (TAMIU) is a comprehensive regional university and part of The Texas A&M University System. Poised at the Gateway to México and serving as the cultural and intellectual hub of a vibrant multilingual and multicultural community, it is also a designated Hispanic-serving institution (HSI). TAMIU is a growing university of over 8,000 students and is home to five colleges/schools: the College of Arts and Sciences, the A. R. Sanchez, Jr. School of Business, the College of Education, the College of Nursing and Health Sciences with its Dr. F. M. Canseco School of Nursing, and University College. For more information, visit www.tamiu.edu.

We offer competitive salaries and a benefits package including health insurance, retirement benefits, and life insurance. Additional pay is available for summer teaching and contingent on enrollment. Financial support for professional development opportunities, such as attending academic conferences, is also provided. Moving expenses are covered in whole or in part by the university.

Our undergraduate ABET-accredited Systems Engineering program, established in 2009, is a transdisciplinary program that emphasizes versatility. Students in the program take courses in industrial engineering, electrical engineering, computer engineering, and mechanical engineering. Systems engineering and Senior Design courses serve as culminating points for this diverse coursework in which students seek to integrate the knowledge they acquired in designing and executing engineered solutions to modern complex problems. Senior Design projects in the past have been in diverse areas, including but not limited to, space mining and exploration, unmanned aerial and ground vehicles, Formula 1 cars, image analysis and computer vision, machine learning, intelligent systems,

wearable devices, soft robotics, nanotechnology, optimization and continuous process improvement, and simulation and analysis of complex systems.

Required Qualifications:

Successful candidates must have a Ph.D. Degree in Systems Engineering, Industrial Engineering, Engineering Management, or a closely related discipline. Candidates with degrees in Computer Engineering or Electrical Engineering with relevant experience to Systems Engineering and the proposed graduate program concentrations will be considered as well. Applicants close to finishing their doctoral studies will be considered if their degree completion is prior to the start of the 2024-2025 academic year.

In addition to teaching and service responsibilities, successful candidates will be expected to build a research program supported by external grants. While all specializations will be considered, candidates with demonstrated experience in one of the following areas are especially encouraged to apply: healthcare systems engineering, industrial automation, advanced data science and analytics (including machine learning and artificial intelligence), energy systems, semiconductor manufacturing, smart manufacturing, critical infrastructure systems, transportation engineering, and Virtual/Augmented/Extended Reality applications. Successful candidates must also demonstrate the potential to publish research in highly ranked reputable journals.

Because of the transdisciplinary nature of the program, successful candidates must be able to teach courses in a variety of areas commensurate with the graduate program's proposed concentrations. Successful candidates must have the ability to contribute to on-going curriculum creation efforts for the future graduate program, as well as revisions for the undergraduate program by proposing courses that deliver cutting-edge knowledge and technologies to students. The undergraduate Systems Engineering program has a strong tradition in senior design and teams of its students regularly participate and win accolades at competitions. Successful candidates are expected to maintain this strong tradition by possessing the ability to effectively mentor and advise students working on senior design projects and undergraduate research activities. They must have the ability to conceive sophisticated senior design projects, solicit projects from industry and other partners, and cultivate a research-oriented culture among students. Successful candidates will participate in ABET reaccreditation activities such as assessment and evaluation of student outcomes.

In addition to Systems Engineering, the School of Engineering offers two other undergraduate programs in Computer Engineering and Petroleum Engineering, which offer excellent opportunities for cross-disciplinary collaboration. There is also a Pre-Engineering program that is a bridge for transfer to other institutions or gives students an opportunity to explore engineering prior to choosing a major within the School. Future expansion plans include an undergraduate Civil Engineering program currently in the program development phase. Alumni of the School of Engineering have excellent job placement in a wide range of settings, including Fortune 500 companies and various business enterprises, as well as prestigious federal, state, and local government agencies. Some companies and organizations that have hired our graduates in recent years include Lockheed Martin, Boeing, Northrop Grumman, General Motors, IBM, Microsoft, UPS, USAA, Goldman Sachs, JP Morgan and Chase, NASA, the U.S. Department of Defense, the Texas Department of Transportation, the City of Laredo, Medline Industries, and Prolamsa Inc. Furthermore, the School of Engineering has graduates who joined prestigious graduate programs at other institutions in Texas and the nation such as Texas A&M University - College Station, the University of Texas at Austin, Columbia University, and the University of Pennsylvania.

Access to Linux clusters and PC nodes dedicated for computational-based research is available at TAMIU for STEM faculty. TAMIU provides generous start-up packages to support new faculty in the acquisition of research equipment and establishment of laboratories.

Application Process:

The first review of applications will be on October 28th, 2023, and will continue until the position is filled. The completed employment application must include:

1. A cover letter that addresses the candidate's interest in the position;
2. Current curriculum vitae;
3. A statement of teaching experience and philosophy;
4. A statement of research interests, experience, and future plans;
5. Unofficial transcripts specifying conferred/ABD degree.
6. Names and contact information of at least three current professional references

Applications must be submitted online at https://employment.tamiu.edu. For more information, you can contact Dr. Kenneth Tobin, Search Committee Chair, via email at ktobin@tamiu.edu or via phone at 956-326-2417.

TAMIU IS AN EO / AA / VETERANS / DISABILITY EMPLOYER
Applicants are subject to a criminal history investigation and employment is contingent on the results of the criminal history investigation.