ILLINOIS TECH | Armour College of Engineering

Tenure-Track/Tenured Faculty Search in Multi-Disciplinary Design, Analysis and Optimization and Autonomous Systems and Robotics

Mechanical, Materials and Aerospace Engineering Department
Anticipated start date: Fall 2022

The Department of Mechanical, Materials and Aerospace Engineering at Illinois Institute of Technology invites tenure-track/tenured faculty applications in the areas of (a) multi-disciplinary design, analysis and optimization and/or (b) autonomous systems and robotics. In the area of multi-disciplinary design, analysis and optimization, we are specifically interested in candidates with expertise in large scale computation, multi-disciplinary design, analysis and optimization (MDAO), data assimilation/analytics, and artificial-intelligence (AI) based approaches for product design, materials design, system design as well as model reduction and development of physical systems and processes. In the area of autonomous systems and robotics, expertise in robotics, autonomous and semi-autonomous ground and air transportation systems are of specific interest. Candidates are sought primarily at the Assistant Professor level, but senior and mid-career candidates with a strong record of sustained success in research, teaching and service may also be considered. The expected start date is Fall 2022.

Illinois Institute of Technology is a private Ph.D.-granting research university with world-renowned programs in engineering, architecture, the sciences, humanities, psychology, business, law, and design. Founded in 1890, Illinois Tech was born different. It was built on the promise set forth in minister Frank Wakely Gunsaulus' "Million Dollar Sermon" to provide access to higher education for students from all different backgrounds and to make a difference in the world through technology-oriented education. This guiding mission and purpose – where students, including those underrepresented in technology, could prepare for meaningful roles in a changing industrial society and achieve professional and economic advancement – remains just as relevant today. Thus, diversity and inclusion are part of the day-to-day experience at Illinois Tech and the centerpiece of its culture. As such, Illinois Tech is home to a diverse and global student population, is committed to providing opportunities to enhance the diversity of its faculty and staff, and strongly encourages applicants from all backgrounds to apply for this position, especially those underrepresented in the field, including, but not limited to, women, African Americans, Latinx, Indigenous peoples and others.

At the time of appointment, applicants must hold an earned doctorate in mechanical, materials or aerospace engineering, or a related field. Faculty members in the department are expected to initiate and sustain a vibrant externally funded research program that supports graduate students and leads to a strong record of published research. The department strongly encourages cross-cutting and collaborative research. Successful candidates are expected to demonstrate a strong commitment to undergraduate and graduate teaching in mechanical and aerospace engineering, as well as to diversity, equity, and inclusion through research, teaching, and/or service endeavors.

The MMAE Department at Illinois Tech offers ABET accredited degrees in mechanical engineering, aerospace engineering, and materials science and engineering, as well as a range of master's degrees and doctoral degrees in mechanical and aerospace engineering and materials science and engineering. The department is home to 25 full-time faculty, approximately 500 undergraduate and 150 graduate students as well as several well-equipped laboratories in all areas of mechanical and aerospace engineering. Information on faculty, research, and degree programs in the department can be found at http://engineering.iit.edu/mmae. The Armour College of Engineering is home to five departments, emphasizes a broad spectrum of interdisciplinary research by faculty and students, and is committed to

inclusive excellence in undergraduate, graduate, and professional education. The main campus is located three miles from downtown Chicago and in close proximity to many industries in the greater Chicago area.

The application package must include a cover letter, curriculum vitae, statements of research and teaching interests/philosophy, a statement on the candidate's commitment to equity and inclusion in education, contact information for five references and a sample of a published research paper submitted as a *single* pdf file to mmae-assistant@iit.edu with the appropriate subject heading "Multi-disciplinary design, analysis and optimization faculty" or "Autonomous systems and robotics faculty" in the email. The one-page statement on equity and inclusion should address specific past and/or potential contributions to the equitable and inclusive delivery of academic instruction and support to and research mentorship of students from a diverse background of countries, cultures and socio-economic conditions. To ensure full consideration, applications must be received by November 15, 2021; however, review of applications will continue until the position has been filled. Additional questions regarding the position should be emailed to Ms. Elena Magnus at magnus@iit.edu.

Illinois Institute of Technology is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA employer; we are committed to enhancing equity, inclusion and diversity within our community. Illinois Tech seeks applications from all individuals regardless of race, color, sex, marital status, religion, creed, national origin, disability, age, military or veteran status, sexual orientation, and/or gender identity and expression. All qualified applicants will receive equal consideration.