Assistant Tenure Track Faculty Position  
Department of Mechanical and Aerospace Engineering  
Department of Integrated Systems Engineering

The Departments of Mechanical and Aerospace Engineering (https://mae.osu.edu/) and Integrated Systems Engineering (https://ise.osu.edu/) at The Ohio State University invite applications for a split tenure track assistant professor faculty appointment in the areas of laser-based additive manufacturing, manufacturing process/structure/property relationships, and the application of data-science to manufacturing. Although a prospective candidate has been identified for this opportunity, we welcome candidates to apply if they would like to be considered for this and future opportunities within these departments.

University Overview: The Ohio State University prides itself on being model 21st-century public, land grant, research, urban, community engaged institution. Ohio State is a top-20 public university, enrolling over 60,000 students, and its Ohio State Wexner Medical Center is one of America’s leading academic health centers and recently ranked No. 4 on Forbes’ list of best U.S. employers for diversity.

College Overview: The College of Engineering offers 14 undergraduate and 13 graduate programs in 12 departments or centers, as well as, three undergraduate and four graduate degrees in the Knowlton School of Architecture, to approximately 10,000 students. The college has recently expanded its degree offerings with a BS in Engineering Technology available on the regional campuses of the university. The college is one of the largest in the field with 405 faculty. The college has 14 National Academy of Engineering members and numerous members of societies and award recipients. In fiscal year 2020, the college had nearly $138.5 million in externally sponsored research expenditures. Industry R&D expenditures for the College of Engineering in fiscal year 2020 totaled nearly $44 million.

Columbus Overview: The Ohio State University is in Columbus, Ohio. As the nation’s 14th largest city, Columbus invites and embraces cultural and economic diversity. We are home to Fortune 500 companies, world-class research institutes, top-ranked hospitals, and the state’s capitol. The city was named the 2015 "Intelligent Community of the Year" by the Intelligent Community Forum, called a "Midwestern style capital" by the New York Times and one of the top ten "Best Places to Live" by Money Magazine. Columbus is home to multiple dynamic arts districts. Read more at (Experience Columbus).

Department Overviews: The Department of Mechanical and Aerospace Engineering (MAE) is one of the largest departments in the College of Engineering at The Ohio State University. We are the home to nearly 80 faculty and over 35 dedicated staff members. Approximately 1900 undergraduates are pursuing a degree in either Mechanical or Aerospace Engineering through rigorous programs that feature hands-on, project-based learning. Nearly 300 graduate students are seeking a degree in either Mechanical, Aerospace, or Nuclear Engineering. Our innovative and creative faculty adhere to the philosophy that true innovation depends upon the cooperation of academia, industry, and government working together to advance the goals of science and technology. Our students and faculty regularly collaborate with colleagues in other departments in the College of Engineering and with multiple other colleges across campus. Strong research relationships exist with the Air Force Research Laboratory, NASA Glenn Research Center, GE Aviation, Honda of America, and numerous other industrial partners. Department faculty have over $26 million in sponsored research expenditures in areas such as advanced transportation systems (automotive and aerospace), energy and environmental quality, materials and manufacturing, micro- and nanotechnology, nuclear energy, and bioengineering while providing leadership for the Center for Automotive Research, The NSF IUCRC Smart Vehicle Concepts Center, the Aerospace Research Center, the Simulation Innovation and Modeling Center, and the Nuclear Reactor Laboratory.

The Department of Integrated Systems Engineering (ISE) at The Ohio State University takes an integrated and interdisciplinary approach to the modeling and analysis of industrial, business, and governmental systems. The core research areas are Operations Research, Human Systems Integration, and Manufacturing Process Engineering. The department is ranked 14th among all industrial engineering departments nationally (US News and World Report 2020).
We have distinguished faculty, including a National Academy of Engineering member, and fellows of professional societies including INFORMS, IISE, IEEE, ASQ, and HFES.

The goal of the ISE Dept. is to be a top-10 industrial engineering department, which leverages its comprehensive expertise to:

- enable and amplify the academic, technological, and societal impact of our research and development.
- produce graduates who are strong ambassadors for the department by demonstrating the technical fluency necessary to excel in professional environments and engage in lifelong learning.
- increase diversity in the graduate student body, in part through cooperative recruitment, support, and retention activities with The Ohio State University (WSE, AGEP) and national resources (such as NSF AGEP supplements); and
- foster a collaborative, diverse, and inclusive learning environment that supports the creation and dissemination of knowledge to the broader global community.

**TIU/ Position Overview:** The Departments of Mechanical and Aerospace Engineering and Integrated Systems Engineering invite applications for a regular tenure-track faculty appointment in the areas of laser-based additive manufacturing, manufacturing process/structure/property relationships, and the application of data-science to manufacturing. The successful candidate is expected to build the capability for manufacturing multi-materials such as metal matrix composites and high entropy alloys by applying various X-ray techniques and large data analysis. This will be a split appointment, with a 75% appointment in Mechanical and Aerospace Engineering and 25% in Industrial Systems Engineering. The Department of Mechanical and Aerospace Engineering will be the home department and the tenure initiating unit (TIU). The successful applicant will be expected to complement and expand MAE and ISE departmental strengths in manufacturing, mechanics, data-science, and materials characterization, and to develop and sustain active sponsored research programs, to develop and deliver compelling core undergraduate and/or graduate courses, and to be an active participant in the international manufacturing and data-science communities. Research leadership is expected, including the ability to attract significant federal funding and industrial partnerships to sustain a vibrant research program.

**Required Qualifications**

Applicants are required to hold a doctoral degree with a major in Mechanical Engineering, Industrial Engineering, Systems Engineering, or a closely related field.

**Desired Qualifications**

- Strong commitment to cultivating an equitable, diverse, and inclusive environment in all areas of scholarship, instruction, and outreach
- Potential for, or the evidence of, the ability to secure federal and/or industrial support for innovative research
- A commitment to interdisciplinary education and collaborative research
- Commitment to engaging in entrepreneurial partnerships
- Creating synergy and developing cross-field collaboration in the emerging high-impact research fields

**How to Apply:** Interested applicants should submit an application in Academic Jobs Online: [https://academicjobsonline.org/ajo/jobs/20473](https://academicjobsonline.org/ajo/jobs/20473). Please include a cover letter, curriculum vita, diversity statement (describe experiences, current interests or activities, and/or future goals that promote a climate that values diversity and inclusion in one or more of the areas of scholarship, instruction and outreach), statements of teaching and research interests, and names and contact information of three references commensurate with the rank sought.

The Ohio State University believes in diversity in people and ideas. What Ohio State does matters. And how we do it matters. When we are at our best, we make a real difference to people. We believe that the university should be a place where people can work and learn together in a safe environment, free of violence, harassment, discrimination, exploitation, and intimidation. As such, finalists for any faculty position that carries tenure must sign an authorization and disclosure form, which will allow current or prior employer(s) to share information to the University regarding any findings of employment-related misconduct or disciplinary proceedings against a candidate and/or any pending investigations related to alleged misconduct. Such information shall include findings and pending investigations with respect to sexual harassment, violence, or harassment; research misconduct; financial fraud or misconduct; foreign


influence violations, grant misuse or misconduct; and/or any other type of finding or pending investigation relating to a candidate’s employer’s policies and rules governing faculty conduct that may reasonably be expected to affect a candidate’s appointment. If the University becomes aware of any past finding of misconduct or pending investigations that were not disclosed, Ohio State will treat that as a serious omission and reserves the right to rescind an offer or terminate employment. For more information, please refer to the Office of Academic Affairs website regarding Faculty Misconduct Reference Checks.

The Ohio State University is committed to establishing a culturally and intellectually diverse environment, encouraging all members of our learning community to reach their full potential. We are responsive to dual-career families and strongly promote work-life balance to support our community members through a suite of institutionalized policies. We are an NSF Advance Institution, a member of the Ohio/Western Pennsylvania/West Virginia Higher Education Recruitment Consortium (HERC) and have an excellent partner in The Ohio State University Wexner Medical Center.

The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, color, disability, ethnicity, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law.

**Application deadline:** Review of applications will begin November 15, 2021 and continue until the position is filled.