

Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222

Downloaded On: Nov. 21, 2024 6:38pm Posted Oct. 2, 2024, set to expire Feb. 2, 2025

Job Title Assistant Professor (TT) Mechanical and Industrial

Engineering - Design

Department Mechanical and Industrial Engineering

Institution University of Massachusetts Amherst

Amherst, Massachusetts

Date Posted Oct. 2, 2024

Application Deadline Open until filled

Position Start Date Available immediately

Job Categories Assistant Professor

Academic Field(s) Mechanical Engineering

Robotics

Apply Online Here https://careers.umass.edu/amherst/en-

us/job/525039/assistant-professor-tt-mechanical-and-

industrial-engineering-design

Apply By Email

Job Description

About UMass Amherst

UMass Amherst, the Commonwealth's flagship campus, is a nationally ranked public research university offering a full range of undergraduate, graduate and professional degrees. The University sits on nearly 1,450-acres in the scenic Pioneer Valley of Western Massachusetts and offers a rich cultural environment in a bucolic setting close to major urban centers. In addition, the University is part of the Five Colleges (including Amherst College, Hampshire College, Mount Holyoke College, and Smith College), which adds to the intellectual energy of the region.



Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222
Downloaded On: Nov. 21, 2024 6:38pm
Posted Oct. 2, 2024, set to expire Feb. 2, 2025

In a 2009 article for MSN.com, Amherst was ranked first as Best College Town in the United States. In 2012, U.S. News and World Report ranked Amherst among the Top 10 Great College Towns in America.

The College of Engineering is ranked as the best public engineering college in New England. The Fall 2022 enrollment included 2,296 undergraduate and 741 graduate students. Research expenditures exceeded \$51 M in the past year and the College is host to 15+ research centers. The College has an excellent record of developing new faculty with 14 of our current faculty members receiving prestigious NSF CAREER awards in just the last four years. A new engineering building will be constructed with a focus on Sustainable Engineering in the near future. More information can be found here: https://engineering.umass.edu/sustainable-engineering-laboratories.

Job Description

The Department of Mechanical and Industrial Engineering (MIE) at the University of Massachusetts Amherst invites applications for a tenure-track faculty position at the assistant professor level in the area of mechanical design. Special consideration will be given to candidates with application areas in digital twin (advanced manufacturing), robotics, renewable energy, sustainable product development or medical devices. Some methodological interests include, but are not limited to, product and process design, AI and machine learning in design, and systems design. In all areas, the candidates should envision a research and teaching program consistent with the College of Engineering's Strategic Plan.

The position is defined broadly across the entire scope of mechanical design. Scholars working across disciplines or in nontraditional areas of mechanical design are particularly encouraged to apply. We hope this broad category reflects our openness to expand the scope of our department beyond our traditional strengths. The candidate is expected to teach existing graduate and undergraduate courses in Mechanical Engineering and will be encouraged to develop creative new curricula in their areas of interest or across disciplines.

The appointment is expected to begin September 1, 2025.



Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222
Downloaded On: Nov. 21, 2024 6:38pm
Posted Oct. 2, 2024, set to expire Feb. 2, 2025

The MIE Department is especially interested in qualified candidates who can contribute, through their research, teaching and/or service, to the diversity and excellence of our vibrant academic community. The Department of Mechanical and Industrial Engineering has 37 full-time faculty members, over 270 graduate students, and over 650 undergraduates. The MIE Department has a long history of successful interdisciplinary research, including digital design and manufacturing, robotics, wind and renewable energy, bioengineering, and computational and experimental fluid dynamics. Academic units affiliated with the department include the Wind Energy Center, Energy Transition Institute, Marieb Center for Nursing and Engineering Innovation, I-Corps at UMass, Center for Personalized Health Monitoring, Institute for Applied Life Sciences, and the UMass Transportation Center.

Requirements

The successful candidate should have earned a Ph.D. in Mechanical Engineering or related fields by August 31, 2025. Applicants must demonstrate potential for scholarly excellence and for developing an externally funded research program. The faculty is expected to maintain an internationally recognized scholarly presence, collaborate in interdisciplinary research teams, and effectively mentor graduate students and postdoctoral fellows. Candidates must be able to teach existing undergraduate and graduate courses in mechanical engineering, specifically courses in mechanical design, in addition to developing courses in their area of expertise.

Additional Information

UMass Amherst is a leader in providing institutional support for faculty to combine work and family/personal responsibilities and was listed among the Chronicle of Higher Education's "Great Colleges to Work For," UMass is in the top 10% of public research-intensive universities in the COACHE survey for having and raising children compatible with the tenure-track. For more information on work-life balance at UMass Amherst, see https://www.umass.edu/prospective-faculty/work/balance.

As a campus with an increasingly diverse student body, we are looking for candidates who can operate effectively in a diverse faculty and student community, and who value collegiality, collaboration, achievement, and integrity. We encourage applications from women, minorities, and individuals with a commitment to mentor under-represented demographics within engineering. We are also interested in



Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222
Downloaded On: Nov. 21, 2024 6:38pm
Posted Oct. 2, 2024, set to expire Feb. 2, 2025

candidates who have had non-traditional career paths, those who have paused their careers for family or pandemic reasons, or who spent time outside of academia. We are committed to helping all constituents reach their full potential, creating best-in-practice operations to support faculty scholarship, and fostering excellence in student experiences inside and outside our department.

The steps of the process are as follows:

- A minimally qualified pool of applicants is identified, ideally by early November
- The committee will work to screen the candidates and form a long list of qualified candidates for Zoom interviews by the end of November. Zoom interviews will commence by the mid of December.
- A short list of candidates for in-person interviews will be determined by Christmas.
- These candidates will be invited to interview on campus. These interviews are expected to take place in February and early March 2025.
- The committee will finalize its recommendations for hiring during mid-March.

Application Instructions

Candidates must apply online and provide the following in their application package. Applications should be addressed to the Search Chair. For full consideration, applications should be received by **November 1st, 2024,** and applications submitted after this date will be reviewed until the search is completed. All files must be provided in .pdf format.

- A cover letter, addressed to "Design Faculty Search Committee". The cover letter should a)
 introduce yourself, b) briefly describe your research interests, and c) describe your vision for this
 position. Page limit: 1 page
- A research statement. Candidates should situate their past research in a broader scholarly context and give their research vision for this position. Candidates are specifically asked to mention the types of scholarship they will perform, how that scholarship will be disseminated, and the expectation for how that scholarship will be funded. Statements will be evaluated based on assessment of demonstrated excellence or demonstrated promise of future excellence. Page limit: 3 pages
- A teaching statement. Candidates should describe their past teaching experience and express
 their teaching vision for this position. Candidates are specifically asked to mention courses in
 mechanical engineering they are qualified to offer and also mention classes they are interested in
 developing. Candidates should address both undergraduate and graduate classes. Statements



Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222
Downloaded On: Nov. 21, 2024 6:38pm
Posted Oct. 2, 2024, set to expire Feb. 2, 2025



Assistant Professor (TT) Mechanical and Industrial Engineering - Design University of Massachusetts Amherst

Direct Link: https://www.AcademicKeys.com/r?job=246222
Downloaded On: Nov. 21, 2024 6:38pm
Posted Oct. 2, 2024, set to expire Feb. 2, 2025

will be evaluated based on assessment of demonstrated excellence or demonstrated promise of future excellence. **Page limit: 2 pages**

- A statement of vision for the candidate's role in advancing equity, justice, inclusion, and broadening participation in engineering. Please discuss prior experiences and planned future actions integrated across research, teaching, service, and outreach that will result in more equitable engineering solutions, help broaden participation in engineering, build an inclusive engineering community, and contribute to the mission of the College of Engineering and UMass. (https://www.umass.edu/strategicplan/strategic-plan). Page limit: 2 pages
- A current curriculum vitae. The CV should list: 1) education, 2) employment, 3) awards and honors, 4) sponsored research (if any), 5) peer reviewed publications, 6) service, and 7) other sections as considered appropriate by the candidate.
- Contact information, (name, title, email address, institution) for 3 professional references. References will not be contacted until the second phase of the search.

The University is committed to active recruitment of a diverse faculty and student body. The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members. Because broad diversity is essential to an inclusive climate and critical to the University's goals of achieving excellence in all areas, we will holistically assess the many qualifications of each applicant and favorably consider an individual's record working with students and colleagues with broadly diverse perspectives, experiences, and backgrounds in educational, research or other work activities. We will also favorably consider experience overcoming or helping others overcome barriers to an academic career and degree.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact