



Assistant Professor in Mechanical Engineering

The Department of Mechanical Engineering at the University of Maine invites applications for a full-time, tenure-track Assistant Professor position with an anticipated start date of as early as January 2023 but no later than August 2023. The position will have a 25% joint appointment in the Advanced Structures and Composites Center to support a new Factory of the Future research initiative focused on large format digital manufacturing.

Required Qualifications:

- A Ph.D. in mechanical engineering, manufacturing engineering, or a closely related field by date of hire.
- A well-documented record of high-quality research in large-scale manufacturing systems, their design, and automation.
- Evidence of a strong potential for obtaining extramural funding and supporting graduate students.
- Evidence of a strong potential for teaching excellence, and capability to develop and teach manufacturing and/or controls related courses at the undergraduate and graduate levels.
- Excellent communication skills and teamwork ability.
- A commitment to diversity, equity, and inclusion in teaching, research, and service.

Preferred Qualifications:

- Desired areas of expertise include, but are not limited to: Design of large-scale additive manufacturing systems; self-aware machine/collaborative robots; controls co-design and artificial intelligence applied to manufacturing system automation.

This is a 50% teaching, 50% research position in mechanical engineering and requires active engagement in service to the University, the State, and the profession. The successful candidate will be expected to lead an externally funded research program that will be primarily associated with the Advanced Structures and Composites Center (ASCC), develop and teach undergraduate and graduate courses, advise and mentor students, publish and present scholarly works, participate in service activities, and demonstrate commitment to diversity, equity and inclusion. This position is one of four cluster hires associated with the ASCC. We highly encourage and welcome applications from all genders and members of historically underrepresented groups.

About the University, Department, and Research Center:

The University of Maine is a comprehensive land and sea grant university with an enrollment of over 12,000 students and research expenditures exceeding \$179M per year. UMaine is the flagship university in the University of Maine System, and is consistently ranked among the top third of public universities engaged in research through the NSF Higher Education Research and Development Survey, and it is classified as an R1 Higher Research Activity Institution by Carnegie.

As a former NSF ADVANCE institution, UMaine is committed to diversity in our workforce and to dual-career couples. It is our intention to create an environment that is inclusive of all individuals. Therefore, UMaine aspires to become a more diverse community in order to extend its enriching benefits to all participants. An essential feature of our community is an environment that supports exploration, learning, and work free from bias and harassment, thereby improving the growth and development of each member of the community.

The Department of Mechanical Engineering has an ABET accredited BS program with an undergraduate enrollment of nearly 500 students, the largest in the University of Maine System. The Department's MS and PhD degree programs have a graduate enrollment of over 60 students, the largest in the College of Engineering. In addition to the undergraduate and graduate concentrations in Aerospace, the Department offers graduate concentrations in Smart Manufacturing, Robotics & Mechantronics, and Offshore Wind Energy. The faculty are very active in research and scholarly pursuits with over \$6M in new awards, including three NSF CAREER awards, in FY22. The faculty also teach courses that support interdisciplinary minors in several areas including Robotics and Renewable Energy Engineering, as well as a certificate in Composite Materials and Structures. Starting in Fall 2022, the Department will be housed in the brand-new Ferland Engineering Education and Design Center, a 115,000 sf, \$78M state-of-the-art teaching and laboratory facility on the UMaine campus in Orono.

With over 300 faculty, staff and students housed in a 100,000 sf lab, the ASCC is the largest university-based research Center in the state of Maine. The ASCC is planning construction of a 78,000 sf – 92,000 sf addition which will house the research Factory of the Future (FoF). The FoF will be a first-of-its-kind testbed for digital flexible manufacturing. The FoF will include AI-enabled arrays of additive, subtractive, and hybrid synchronous robotic manufacturing systems, with Q/A Q/C enabled by real-time sensing and High-Performance Computing (HPC). Work inside of the FoF will include research on the manufacturing and testing of large new systems made from bio-based and other advanced materials, focusing on a unique integration of highly flexible (e.g., robotic, interchangeable end effectors) digital manufacturing processes with non-contact sensing and real-time, closed-loop feedback from the HPC system. An added advantage is that this faculty hire is one of the four new faculty cluster hires supporting the ASCC and the FoF initiative.

This new faculty member will be housed in the Mechanical Engineering Department with a 25% joint appointment in the ASCC.

The University of Maine offers a [wide range of benefits](#) for employees including, but not limited to, tuition benefits (employee and dependent), comprehensive insurance coverage including medical, dental, vision, life insurance, and short and long term disability as well as retirement plan options. As a former NSF ADVANCE institution, the University of Maine is committed to diversity in our workforce and to dual-career couples.

UMaine is located in beautiful Central Maine. Many employees report that a primary reason for choosing to come to UMaine is quality of life. Numerous cultural activities, excellent public schools, safe neighborhoods, high quality medical care, little traffic, and a reasonable cost of living make the greater Bangor area a wonderful place to live.

Learn more about what the Bangor region has to offer [here](#).

For more information and to apply for this position, go to <https://umaine.hiretouch.com>.
(Position ID 78042)

Applicants should submit (1) cover letter which describes your experience, interests, and suitability for the position, (2) resume/curriculum vitae, (3) teaching philosophy, (4) research statement, and (5) contact information for three professional references, including postal and email addresses and phone numbers. Review of applications will begin on March 1, 2022 and will continue until the position is filled.

The University of Maine is an EEO/AA employer, and does not discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status, gender expression, national origin, citizenship status, age, disability, genetic information or veteran's status in employment, education, and all other programs and activities. The following person has been designated to handle inquiries regarding non-discrimination policies: Amie Parker, Interim Director of Equal Opportunity, 101 North Stevens Hall, University of Maine, Orono, ME 04469-5754, 207.581.1226, TTY 711 (Maine Relay System).