Assistant/Associate/Full Professors - Mechanical Engineering
University of Massachusetts Lowell

The Department of Mechanical Engineering at the University of Massachusetts Lowell is seeking to hire several full-time tenure-track faculty at the ranks of Assistant or Associate Professor; applications for Full Professor will also be considered for exceptional candidates. Applicants must have earned Doctoral degrees in mechanical engineering, or closely related disciplines, and are required to have a record of quality teaching and scholarship. Successful applicants will collaborate with existing faculty members, teach classes to support the undergraduate and graduate programs, develop new courses, advise and recruit graduate students, and are expected to develop a robust, externally funded research program in one of the following areas:

(1) **Computational Transport Phenomena:** including multi-physics, multi-scale, multi-phase, and/or reaction kinetics with a specific focus on energy applications such as combustion, plasma processes, solar thermal and photo-thermal systems, electrochemical and biomass energy systems, as well those related to the food-energy-water nexus.

(2) **Robotics and Autonomous Systems:** biomechanics, soft robotics, compliant robots for manufacturing, advanced networked control systems, multi-agent dynamic systems, cooperative robotics, cyber-physical systems, exoskeletons, and manipulation to support robotic programs with a strong applied complement. Faculty will have the opportunity to work with the NERVE Center, a 10,000 sq. ft. robot testing facility, as well as the NASA Valkyrie humanoid robot.

(3) **Structural Dynamics and Dynamic Systems:** Development of advanced structural dynamic modeling techniques using analytical and experimental approaches (conventional finite element and experimental modal analysis complimented with advanced hybrid system modeling and reduced order modeling for linear and nonlinear systems). Modeling and analysis of structural dynamic systems with applications to wind energy, aerospace, vehicle, robotic, energy or other systems.

**Note:** Candidates must clearly specify a single research area (of the three listed) in bold font in the first sentence of their Cover Letter. In cases of demonstrated outstanding research productivity and scholarship, an appointment with tenure may be considered. To apply, visit: [http://jobs.uml.edu](http://jobs.uml.edu).

Applications received by December 15, 2017 will be considered in the first review of candidates. However, later applications may be considered for these positions. Each position will close after an adequate number of qualified applications is received. UMass Lowell is a Carnegie Doctoral High Research (RU/H) university ranked in the top tier of US News’ National Universities, and is strategically located 30 miles northwest of Boston in the northeast Massachusetts high-tech region. The department has over 900 undergraduate students and 150 graduate students. An optional co-op program is available to undergraduates. The undergraduate engineering program is based on a design-build-test methodology and is ABET accredited. The University of Massachusetts Lowell is committed to increasing diversity in its faculty, staff, and student populations, as well as curriculum and support programs, while promoting an inclusive environment. We seek candidates who can contribute to that goal and encourage candidates to apply and to identify their strengths in these areas.