



Open Rank Faculty Positions in Mechanical Engineering

The Department of Mechanical Engineering (ME) at the University of Maryland, Baltimore County, invites applications for one or more open-rank (i.e., tenured or tenure-track) faculty positions in emerging fields of mechanical engineering including, but not limited to control, robotics and autonomous systems, solid mechanics, manufacturing, and materials. Backgrounds in robotics and autonomous systems are preferred. In addition to scholarly activity and funded research, expected duties will include undergraduate and graduate teaching, supervision and mentoring of student researchers, and professional service to the community. Applicants must have an earned doctoral degree in mechanical engineering or related fields prior to the start date and should be involved in advancing diversity, equity, and inclusive excellence at any level of education in the broader field of mechanical engineering.

The ME department currently consists of 16 tenured or tenure track faculty (25% female, 0% African American, 12.5% Hispanic and 75% foreign born), approximately 590 undergraduate majors, and 70 full-time graduate students. The faculty are engaged in a broad effort to provide high-quality education, by continuous improvement of the curriculum, fostering student research, practical training and internships, promoting diversity and inclusion at all levels, and providing all students with opportunities for peer-support, mentoring, and financial assistance. The ME department actively partners with the Society of Women Engineers (SWE), the National Society of Black Engineers (NSBE), the Society of Hispanic Professional Engineers (SHPE), and the UMBC Center for Women in Technology (CWIT) to foster increased involvement of women, veterans, and other under-represented groups in engineering and technology-creation, at all levels. Currently, the ME undergraduates consist of 20% female, 23% African American, 8% Hispanic, and 13% Asian. The department has a dynamic and vibrant graduate program that offers M.S. and Ph.D. degrees in four thematic areas: Biomechanical Engineering, Dynamic Systems and Design (including Control, Robotics, and Autonomous Systems), Solid Mechanics and Materials Science, and Thermal/Fluids Sciences. Successful candidates will find ample opportunities for collaboration, within the department, with other departments, notably Computer Science and Electrical Engineering, and with other nearby institutions and companies.

UMBC is a dynamic public, Carnegie R1 (very high research activities) research university integrating teaching, research, and service. Its 500+ acre campus is located in a thriving, prosperous region with excellent infrastructure. As an Honors University, UMBC offers academically talented students a strong undergraduate liberal arts foundation as preparation for graduate and professional study, entry into the workforce, and community service and leadership. UMBC is dedicated to promoting cultural and ethnic diversity, social responsibility, and lifelong learning. The 2018 US News and World Report Best Colleges report ranked UMBC 9th in the Most Innovative National Universities category and 8th in Best Undergraduate Teaching in the National Universities category. The Chronicle of Higher Education named UMBC as a Great College to Work For and distinguished its commitment to work-life balance. Our strategic location in the Baltimore-Washington corridor assures easy access to the resources of many federal laboratories, state agencies, and high-tech companies, and facilitates equipment-sharing and scientific collaboration.

There are 25+ research centers at UMBC and 130+ companies housed in its two adjacent research parks. The campus is < 10 minutes from an international airport (BWI) and multiple rail stations (Amtrak, MARC). UMBC has special programs supporting startups mainly in cybersecurity, transportation, clean energy, life sciences, and/or microfabrication. The campus is surrounded by one of the greatest concentrations of

commercial, cultural, and scientific activity in the nation. Located on the western shore of the Chesapeake Bay, Baltimore offers all of the advantages of modern, urban life, including professional sports, major art galleries, theaters, and a world-class symphony orchestra. The city's Inner Harbor area is an exciting center for entertainment and commerce. The nation's capital, Washington DC, is a great tourist attraction with historical monuments and museums. Other nearby institutions include the Johns Hopkins University, UMB, UMCP, Naval Academy, U Pennsylvania, George Mason, and U Delaware, plus a very large number of high-tech companies, military bases, and federal agencies. UMBC is one of nine partners in The Universities at Shady Grove, a new consortium of teaching universities operating within the University System of Maryland, located in Rockville, MD.

Since its inception, UMBC is committed to the core values of equity and inclusion, which are the hallmark of our community. Our commitment is supported by a community that values diverse perspectives and encourages collaboration and innovation. According to NSF data, UMBC is the number one baccalaureate institution for African American undergraduates who go on to earn Ph.D.s in the natural sciences and engineering, as well as doctorates in the life sciences, mathematics, and computer science. NSF awarded \$10M to UMBC to expand successful initiative developing underrepresented postdocs in STEM. The College of Engineering and Information Technology (COEIT) received a bronze award from the American Society of Engineering Education's Diversity Recognition Program. Within the college, the Center for Women in Technology (CWIT) is dedicated to increasing the representation of women and underrepresented minorities in engineering and computing fields.

Times Higher Education recently ranked UMBC #3 in the nation for social and economic impact. Many of its faculty are engaged in cutting-edge science, technology development, and/or entrepreneurial activity, and the ME research has been funded by a large number of federal agencies (e.g., DOD, NASA, NSF, NIH, ARO, ARL, ONR, AFOSR, DOE, DARPA, USDA, NIST), not-for-profit entities (e.g, World Bank, CIMMYT, MII), and/or corporations. All ME faculty and many ME students attend national or international conferences regularly.

All applications will be processed in [Interfolio](#) (116532). The initial application should include a cover letter, a curriculum vitae, and three separate statements regarding the applicant's 1. research interests and plans (limit 4 pages), 2. teaching experience and philosophy (limit 3 pages), and 3. commitment to inclusive excellence (limit 2 pages). Contact information for three professional references may also be requested at a later date. For best consideration, applications should be completed by 02/01/2023 but will still be accepted until the position is filled. Questions may be sent to mesearchtt@umbc.edu.

The Faculty Search Committee will organize a webinar from 10:00 AM to 11:00 AM ET on 01/9/2023 to answer questions from potential applicants. The webinar link is [here](#). Password: ttsearch (Join by phone +1-202-860-2110 United States Toll. Access code: 2623 973 6488).

UMBC is an Equal Opportunity/Affirmative Action Employer. Minorities, women, Veterans, and individuals with disabilities are encouraged to apply.

As an institution that receives federal financial assistance, UMBC adheres to Title IX and does not discriminate on the basis of sex. For more information about Title IX and contact information for Title IX Coordinator, please visit <https://oei.umbc.edu/policies-and-procedures/>.