



Head of the Department of Mechanical Engineering

Kettering University, a private, nonprofit institution in Flint, Michigan, with strong connections to the automobile, aerospace, biotechnology, finance, and many other industries, invites applications and nominations in the search for the next **Head of the Department of Mechanical Engineering**. This position will lead Kettering's flagship program and develop an entrepreneurial vision that propels the Department to the forefront of the industry while aligning it with the University's new academic focus areas of advanced mobility, new energy vehicles, intelligent manufacturing, artificial intelligence, and sustainability.

The Institution: Throughout its history, [Kettering University](#) has blazed a trail in higher education thanks to its novel combination of rigorous academic programs, rich experiential learning opportunities, and in-demand applied research. No institution offers a cooperative program as robust and intentional as Kettering's, in which all undergraduates spend half of their time engaged in experiential learning and the other half learning the theory behind that practice. The University enjoys long-standing relationships with more than 400 corporate partners and provides extraordinary placements for cooperative/applied experiences for current students as well as an array of post-graduate education opportunities for the employees of these corporations. These partnerships also provide numerous industry-sponsored applied research opportunities. The University provides its students and faculty with state-of-the-art facilities, including the Mobility Research Center (MRC), which gives students unparalleled experience in advanced mobility research, the "T-Space" and maker spaces that encourage students to "Tinker, Think, and Thrive," and other spaces that empower students to collaboratively develop their entrepreneurial spirit. Kettering's talented, diverse faculty specialize in fields including autonomous driving, artificial intelligence, advanced manufacturing, electrification and new energy vehicles, materials research, and much more. Every year, Kettering faculty garner support through sponsored research opportunities from federal agencies, foundations, and industry sponsors. Kettering is also one of the top institutions in securing NSF MRI grants. These major research instruments not only support faculty research but provide undergraduate and graduate students cutting-edge research experiences as well. In 2022, the University undertook an ambitious effort to reshape itself and better meet the needs that the industry of the future is going to require. To create future-oriented offerings, Kettering developed an interdisciplinary approach with connections to the mobility industry and others already in the curriculum, such as robotics and cybersecurity, which have broader applications. The University identified five interdisciplinary perspectives—Advanced Mobility, New Energy Vehicles, Intelligent Manufacturing, Artificial Intelligence, and Sustainability—that can be paired with engineering, computer science, and management disciplines, allowing students and graduates to be nimble as the careers of the future unfold. These multidisciplinary academic focus areas enable students to develop specializations within their degree programs, allowing, for instance, a mechanical engineer to have a specialized focus in sustainability, intelligent manufacturing, or artificial intelligence and be able to apply this knowledge to the latest developments in mobility or a variety of other industries.

The Department: The [Department of Mechanical Engineering](#) enrolls more than 600 undergraduate students in the Bachelor of Science in Mechanical Engineering program, which has four focus areas. It also supports roughly 60 graduate students across two master's degrees—a Master of Science in Mechanical Engineering and a Master of Science in Mobility Systems. There are 26 members of the faculty, and the Department provides lead advisors for student teams participating in vehicle design (both human-driven and autonomous), build, and race competitions. Students have access to department-maintained garages and spaces that allow for hands-on experience and access to modern manufacturing equipment. Coursework includes use of many lab spaces, such as the Crash Safety Center,

a fluid-thermo lab, dynamic systems lab, hands-on manufacturing shop, fuel cell lab, and signal analysis lab. While strong historical ties allow the Department to grow with and in front of the automotive industry, the Department is simultaneously expanding into industries connected to Advanced Mobility, Intelligent Manufacturing, New Energy, Sustainability, and Artificial Intelligence. Other arenas into which the Department has expanded include engineering measurement systems, advanced simulation, biomechanical engineering, and control system design and analysis. Professors from the department were recently awarded the National Science Foundation's Enabling Partnerships to Increase Innovation Capacity (EPIIC) grant. This will provide additional resources for collaboration and increase the department's capacity for cutting-edge research in support of industry, and it will also give professors more exposure to the state of the industry and its needs. Finally, with many active members of the American Society for Engineering Education, the department also researches engineering education, working to constantly advance the department's engineering pedagogy by remaining abreast of the research and providing its own observations and discoveries.

The Position: The Head of the Department of Mechanical Engineering will lead the University's flagship program at a time of rapid innovation and transformation across the many industries it supports. The next Head of the Department will possess an entrepreneurial outlook, a keen understanding of contemporary trends in mechanical engineering, and the ability to facilitate the Department's collective articulation of a vision for its future in the changing landscape of engineering. Additionally, this position will help bring the curriculum into sync with the five focus areas of Advanced Mobility, Intelligent Manufacturing, New Energy, Sustainability, and Artificial Intelligence. The Head of the Department will foster interdisciplinary ties across departments and colleges and empower faculty to set a future-oriented direction for the development of curriculum, classrooms and labs, and co-op and research partnerships aligned with the key areas while maintaining the faculty's sense of ownership over the department. The Head of the Department will also obtain resources and coordinate efforts to move this vision forward. Additionally, this position will collaborate across the University to improve enrollment through the development of in-demand academic programming and effective recruitment and retention strategies. The Head of the Department will serve as the external face and lead partnership-builder for the Department. In this capacity, the Head of the Department will help expand the University's well-established network and build on the Department's stellar record of capitalizing on this network by identifying and seizing on novel educational and research partnerships as well as fundraising opportunities. Other regular duties and responsibilities of the position include (but are not limited to):

- Provide leadership in supporting and sustaining the mission and vision of the Department
- Recruit, retain, and develop quality faculty and student-centered staff
- Create an environment that supports faculty research and scholarly activity
- Work with various stakeholders to retain and graduate high-quality students
- Participate in recruitment activities to grow enrollment in the program
- Collaborate with other departments and staff to provide an excellent learning and working environment
- Maintain ABET accreditation through continued program assessment
- Represent the department at the university, industry, and community levels
- Collaborate with external stakeholders to continuously improve the program
- Maintain and manage the departmental budget
- Assess faculty and staff performance for promotion, tenure, and merit recommendations
- Manage faculty teaching load levels and class schedules
- Maintain strong industrial relations to enhance opportunities for applied research and support for instructional and laboratory improvements
- Work closely with the Cooperative and Experiential Department to identify new employer partners and continue building relationships with current employers
- Work with the Dean of the Graduate School and Research to grow the graduate programs

Qualifications: The University encourages applications from candidates who would bring to Kettering a proactive and entrepreneurial spirit and approach to education. Additionally, the ideal candidate may possess many or all the following experiences and qualities:

- Industrial experience or a strong record of partnership with industry
- Excellent communication and interpersonal skills
- Engineering-related teaching experience
- Leadership or related experience, such as holding roles in management/administration, leading a department, or chairing a major committee
- Experience with the ABET accreditation process
- Commitment to Kettering University's Values: Respect, Integrity, Creativity, Collaboration, and Excellence
- Expertise in applying mechanical engineering disciplines to the focus areas of Advanced Mobility, New Vehicles, Sustainability, Intelligent Manufacturing, and/or Artificial Intelligence
- Excellence in teaching, research, and service sufficient for an appointment as a tenured full professor
- Earned Ph.D. in Mechanical Engineering or a related field

Location: Kettering University is located in [Flint, Michigan in Genesee County](#), 66 miles northwest of Detroit. Although the economy of Flint has historically been tied to the automobile industry, it has seen significant diversification over the decades and Flint entrepreneurs and businesses have brought new life and energy to the city. New restaurants and businesses have opened in downtown Flint, including the newly renovated historic Capitol Theatre. Saginaw Street offers a vibrant dining scene, and the Flint Farmers' Market is regarded as one of the country's best urban farmers' markets. The city also hosts seasonal events, including the week-long Back to the Bricks car show, which brings more than 500,000 car enthusiasts to the area annually. Other points of interest include the [Flint Cultural Center](#), which comprises Flint Institute of Arts, Flint Institute of Music, Sloan Museum of Discovery, Longway Planetarium, Whiting Auditorium, and the recently-upgraded, American Institute of Architects award-winning Gloria Coles Flint Public Library. Kettering University enjoys a wonderful partnership with these organizations offering students, faculty, and staff opportunities to learn, participate, and expand their creative skills. The region offers a wealth of parks and recreation areas, including hiking trails, ski slopes, lakes, and golf courses. Additionally, the city is home to the Flint Firebirds, a major junior ice hockey team, and the Flint City Bucks, a USL Soccer team that plays at Kettering University's Atwood Stadium. Flint is surrounded by other charming towns that offer unique boutique shopping and excellent restaurants. These cities pride themselves on their top-tier schools and vibrant sense of community. Wider [Michigan](#) offers other wonderful amenities, including Great Lakes beaches, beautiful forests, and the world's largest system of freshwater sand dunes.

Application: Candidates should submit a cover letter and resume to RPA Inc. at KetteringDean@rpainc.org. For a confidential discussion or to make a nomination, contact Isaac Karaffa, Vice President and Senior Consultant, or Dana John Cohick, President, at the email address above. Candidate review begins on January 10, 2025, with first-round interviews to follow.

Kettering University, as an equal opportunity/ affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. Kettering University is deeply committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation including gender identity or expression, disability, religion, height, weight, genetic information, or veteran status in employment, educational programs and activities, and admissions except where religion, sex, or age are bona fide job-related employment requirements.



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