



## **Assistant/Associate/Full Professor Positions: Structural Engineering/Structural Mechanics**

Marquette University's Department of Civil, Construction & Environmental Engineering (CCEE) invites applications for **two tenured/tenure-track faculty positions in structural engineering/structural mechanics** to start August 2020. One position is expected to be at the rank of professor or associate professor with tenure, while the other will be at the assistant professor rank (tenure-track). Expertise in structural engineering in one or more of the following areas or a related area is required: design of steel structures; structural/materials testing and modeling; computer-aided structural design; dynamic loading and response of structures (earthquake, wind, blast, impact, etc.); bridges, tunnels and other transportation structures; soil-structure interaction; robustness and resiliency of structures; risk and reliability analysis; structural health monitoring; resilient and sustainable infrastructure.

The CCEE Department ([www.marquette.edu/civil-environmental-engineering](http://www.marquette.edu/civil-environmental-engineering)), one of the four departments in the Opus College of Engineering, maintains a student-centered focus on rigorously educating the next generation of leaders within the broad discipline of civil engineering and beyond. Students, many immersed in research experiences, are engaged in their respective curricula by 15 tenure-track/tenured faculty members who are actively involved in research, teaching, and service. A significant number of dedicated non-tenure-track faculty also contribute to the Department's teaching and service missions. The Department currently serves approximately 270 undergraduate and 33 graduate students (roughly split equally between M.S. and Ph.D.). The Department oversees the operation of the state-of-the-art Engineering Materials and Structural Testing Laboratory (EMSTL), a 5300-sq.-ft. facility including a strong floor, strong wall, hydraulic testing system, environmental chamber, four universal test machines and other equipment and appurtenances for structural and materials testing. More information on the EMSTL may be found at [www.marquette.edu/engineering/facilities/materials-structural-testing-lab.php](http://www.marquette.edu/engineering/facilities/materials-structural-testing-lab.php). Applications from candidates who are interested in utilizing this facility in their research and possibly serving as Director of the EMSTL are especially encouraged.

Marquette University, a leading Catholic, Jesuit institution founded in 1881, has a distinctive character that is derived from its balanced dedication to broad-based undergraduate education, high-quality graduate programs, and scholarly research, with an emphasis on a values-based approach that focuses on the personal growth of each individual student. Located in downtown metropolitan Milwaukee, Wisconsin, the University currently serves over 8500 undergraduate and 3300 graduate students. The Opus College of Engineering (OCOE, [www.marquette.edu/engineering](http://www.marquette.edu/engineering)), founded in 1908, is the largest Catholic, Jesuit Engineering College in the nation with current enrollments of approximately 1300 undergraduate and 200 graduate students and \$7.4M in extramural funding. The OCOE houses four departments: Civil, Construction and Environmental Engineering; Mechanical Engineering; Biomedical Engineering (a joint department with the Medical College of Wisconsin); and Electrical and Computer Engineering. The OCOE includes researchers and facilities in Structural Engineering, Dynamic Behavior of Materials, Micro/Nano Devices, Sensors, Green Infrastructure, and other areas. Strategic planning with the College includes hiring initiatives, including three new tenure-track/tenured hires in the CCEE Department in the next two years and another four in the Department of Mechanical Engineering. Specializations of these new hires are expected to include structural engineering/structural mechanics, mechanical systems (continuum mechanics, strength of materials, numerical modeling, etc.), and

vibrations/controls, among others. Opportunities will exist to collaborate with these new faculty as well as current faculty researchers. The urban location of the University and College is ideal as there exist many opportunities for local, state, and federal funding of infrastructure-related research. For example, Marquette University is a member of the Wisconsin Highway Research Program (WHRP), which identifies and implements over \$1.2 million in applied research each year to address the state's bridges, pavements and other transportation needs. In addition, the Wisconsin Department of Transportation supports approximately \$1.8 billion annually for construction and operations.

The OCOE is home to one of the first engineering co-op programs in the nation. Established in 1919, the program places undergraduate students from all engineering disciplines in full-time multi-semester co-op and summer intern positions with more than 200 leading engineering and technology firms across the country. The educational and research facilities of the College are state-of-the-art, as evidenced by the recently completed Engineering Hall, one of several ambitious new building projects on campus. Representing a new concept in higher education, Engineering Hall allows students and faculty to tackle global challenges in a setting that educates and inspires.

### Duties and Responsibilities

- teach undergraduate and graduate (MS/PhD) courses in design of steel structures and/or in another area of specialization within structural engineering
- advise and direct research of graduate and undergraduate students
- build a strong, externally funded research program of national/international visibility
- perform service to the Department, College, and University as well as to the professional and civic communities

### Required Qualifications

- an earned doctorate or Ph.D. degree in civil engineering or a closely related field
- an academic record appropriate for appointment at the rank of Assistant, Associate, or Full Professor
- experience in performing and publishing high-quality research
- potential for teaching excellence (Asst. Prof.) or demonstrated teaching excellence (Assoc./Full Prof.) at the university level
- demonstrated expertise in structural engineering/structural mechanics
- potential for securing research funding (Asst. Prof.) or experience in securing research funding (Assoc./Full Prof.)

### Desired Qualifications

- knowledge of design of steel structures and/or structural/materials testing is highly desirable
- other desirable areas include one or more of the following: computer-aided structural design; dynamic loading and response of structures (earthquake, wind, blast, impact, etc.); bridges, tunnels and other transportation structures; soil-structure interaction; robustness and resiliency of structures; risk and reliability analysis; structural health monitoring; resilient and sustainable infrastructure
- professional engineering licensure is highly desirable, as is experience with acquiring funding from U.S. (federal or state) funding agencies, research foundations, U.S. professional societies, and/or U.S. industry sources
- a bachelor's degree from an ABET-accredited program is desirable

### Application Information

Review of applications will begin on Dec. 1, 2019, and will continue until the positions are filled. Applications must include (1) letter of application stating the position sought (Asst., Assoc., or Full Prof.) and outlining the applicant's qualifications for the desired position, (2) complete CV including a complete list of publications

and funding information, (3) teaching philosophy statement, (4) research philosophy statement, (5) names, affiliations, phone numbers, and mailing and e-mail addresses of at least three references, including a brief description of the relationship between each reference and the applicant, and (6) unofficial transcripts. For further information and to apply: <http://employment.marquette.edu/postings/12389> .

Those interested in either position are strongly encouraged to apply directly via the above link. In addition, nominations and inquiries of interest may be sent in confidence to:

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### Diversity and Inclusion

It is the policy of Marquette University to provide equal employment opportunities (EEO) to all employees and applicants without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status or any other applicable federal or state-protected classification.

Applicants with experience working with diverse groups of students, faculty, and staff and the ability to contribute to an inclusive climate are particularly encouraged to apply.

Information on Marquette University's commitment to diversity and inclusion may be found at [www.marquette.edu/diversity/about.php](http://www.marquette.edu/diversity/about.php) .