

Assistant Professor Search at the intersection of Structural and Geotechnical Engineering

The Department of Civil and Environmental Engineering at Northwestern University invites applications for a tenure-track faculty position at the assistant professor level, with emphasis on multi/inter-disciplinary profiles at the intersection of structural mechanics, geotechnical engineering and geomechanics, and the science and technology of novel construction materials.

At a time of increasing urbanization, energy transition, and unprecedented climate extremes, civil and environmental engineers are called to transform the urban space and its connecting networks by reimagining the next generation of sustainable, adaptive, and resilient infrastructure systems. The CEE Department at Northwestern is leading the way in addressing these challenges by reimagining how the cities of tomorrow will be the core of the global economy while preserving our planet and protecting the health and safety of urban communities.

We seek candidates who will lead civil and environmental engineering into a new era where sustainable urban systems are designed to adapt to every facet of modern life and a changing climate. To pursue this vision, we aim to capitalize on disruptive innovations in disparate fields, such as mechanics, automation, remote sensing, and artificial intelligence. While we welcome applications from all domains of mechanics of materials, structural, and geotechnical engineering, priority areas for the department include: (i) adaptive and carbon-negative building materials, including soft matter, granular, architected and metamorphic materials that possess tunable internal structures dynamically evolving to maximize performance and durability, while minimizing environmental impacts; (ii) surface and subsurface infrastructure systems with bio-inspired designs and transformative multi-functional capabilities, from energy harvesting, storage, and conversion to sensing and data transmission; (iii) urban monitoring technologies enabling the implementation of next-generation early warning systems that harness smart, connected, and predictive capabilities at multiple length and time scales; (iv) large-scale additive manufacturing harnessing novel materials produced with local bio-geological sources and deploying solid-fluid phase transitions guided by physics-based computer models.

Applications will begin to be reviewed on December 15th 2023 and will be accepted until the position is filled. Applicants are expected to provide statements about their research and teaching visions, along with a CV including a list of publications, and a list of at least three (3) references. We also request a statement on diversity that addresses potential contributions to enhancing diversity, equity, and/or inclusion.

Please visit <https://www.mccormick.northwestern.edu/civil-environmental/careers.html> for more information and to apply for this position. Questions regarding the position can be directed to CEE Careers (CEECareers@northwestern.edu).

The Northwestern campus sits on the traditional homelands of the people of the Council of Three Fires, the Ojibwe, Potawatomi, and Odawa as well as the Menominee, Miami and Ho-Chunk nations. We acknowledge and honor the original people of the land upon which Northwestern University stands, and the Native people who remain on this land today.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply.

Application link: [Northwestern CEE Assistant Professor Application](#)