

Faculty positions in computational and bio-inspired civil systems

TEXAS TECH UNIVERSITY -The Civil, Environmental, and Construction Engineering (CECE) Department invites applications for multiple tenure-track positions in computational and biologically inspired civil systems at the assistant professor level. Exceptional candidates will be considered at higher ranks. The Whitacre College of Engineering has identified four major research thrust areas as part of the current strategic plan – namely, water, energy, smart infrastructure and engineering medicine, with nanotechnology and big data applications as cross-cutting themes. Strong preference will be given to candidates whose research interests are aligned with one or more of these areas. Candidates with a demonstrated record of multi- or transdisciplinary research in one of the following areas are strongly encouraged to apply:

a) computational materials; b) bio-inspired and bio-derived material applications to geotechnical and transportation infrastructure, c) simulation of alternative energy infrastructure; d) multi-scale modeling of livability hazards, and e) computational mechanism design applications to civil systems. Candidates are expected to demonstrate potential for high-impact research and high-quality teaching. The successful candidate will be expected to develop an externally-funded and internationally-recognized program of independent and collaborative research, supervise graduate students, teach undergraduate and graduate classes in CECE, demonstrate an ongoing commitment to serving diverse student populations, and serve the Department, the Whitacre College of Engineering, and the University. Applicants must hold a doctoral degree in Civil Engineering or a closely related field at the time of appointment.

The CECE Department is home to 32 tenure-track/tenured and research faculty, including two National Academy of Engineering (NAE) members. Nearly 25 percent of the faculty are women and minorities. Six new faculty have been hired in the last two years. Department faculty's research activity spans regional, national and international research, exceeding 12.5 million dollars in current sponsored research, while citations of their published work exceed 22,500 in the Scopus database, and over 35,000 citations in Google Scholar. Additional information about the department is available at www.depts.ttu.edu/cweb/index.php. The department awards bachelor's degrees in Civil Engineering (BSCE) and Construction Engineering (BSConE), master's and doctoral degrees in Civil Engineering, as well as a five-year professional Master of Environmental Engineering (MEnvE) degree. In the 2018-2019 year, the department enrolled 369 civil, construction and environmental engineering undergraduate majors; and 135 graduate students with a 50-50 MS-PhD distributional split. Department faculty advised 178 undergraduate degrees, 42 Master's degrees and 11 PhD degrees to completion in 2018-2019.

Texas Tech University (TTU) is a comprehensive university with 38,803 students (Fall 2019) enrolled in twelve schools and colleges across campus. The Texas Tech University Health Sciences Center (TTUHSC) located across campus houses the school of biomedical sciences and the school of medicine, offering opportunities for research collaborations at the intersection of engineering and medicine. The CECE department is part of an inclusive community of scholars in the Whitacre College of Engineering that places high value on diversity as an enabler of inspirational, high-quality experiential education, synergies between undergraduate and graduate research, and transformative multidisciplinary collaborations. TTU recently achieved designation as a Hispanic Serving Institution (HSI). TTU is among 94 public universities and colleges in the Carnegie Classification of Institutions of Higher Education's "Highest Research Activity" category. The university is located in Lubbock, Texas. The city is renowned for its friendly people, pleasant climate, and commitment to the University. In recent years, Lubbock has been ranked in the top quartile of US cities for socio-economic and demographic growth.

Review of applications will commence immediately and will continue until the position is filled. Full consideration will be given to applications received by November 15, 2019. It is anticipated that the appointment will begin Fall 2020.

Individuals interested in applying in the **computational materials** area, or **simulation of alternative energy infrastructure** area, or **computational mechanism design** applications area, are requested to go to <http://www.texastech.edu/careers/faculty-positions.php> and search for Requisition ID 19255BR.

Individuals interested in applying in the **bio-inspired and bio-derived material applications** area, are requested to go to <http://www.texastech.edu/careers/faculty-positions.php> and search for Requisition ID 19256BR.

Individuals interested in applying in the **multi-scale modeling of livability hazards** area, are requested to go to <http://www.texastech.edu/careers/faculty-positions.php> and search for Requisition ID 19257BR.

Please upload (preferably in PDF format) [1] a cover letter, [2] detailed curriculum vita, and [3] other documents (as requested on the application website) including statements of research and teaching interests, and the names, physical and email addresses, and telephone numbers of three references.

As an Equal Employment Opportunity/Affirmative Action employer, Texas Tech University is dedicated to the goal of building a culturally-diverse faculty committed to teaching and working in a multicultural environment. We actively encourage applications from all those who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community at Texas Tech University. The university welcomes applications from minorities, women, veterans, persons with disabilities, and dual-career couples.