Assistant/Associate Professor of Damage Modeling for Infrastructure Security
Department of Civil & Environmental Engineering

The Civil and Environmental Engineering (CEE) Department at the University of Connecticut (UConn) invites applications for a tenure-track position to conduct teaching, research, and service in *Damage Modeling for Infrastructure Security* at the Assistant/Associate Professor level, with a joint appointment in Natural Resources and the Environment (NRE). UConn is a premier research institution – designated as a Research University/Very High research activity (RU/VH) by the Carnegie Foundation. CEE at UConn addresses global challenges through its didactic and research missions by preparing engineers to face major societal challenges and performing cutting-edge research to develop new solutions to global problems. We are one of the leading departments in the northeast with excellent educational and research programs and facilities. The department's active research activities include over $5.5 million in more than 40 active grants with $4.2 million in annual research expenditures generated from a wide variety of funding sources. These activities provide funding and superb training opportunities for our more than 100 graduate and 300 undergraduate students to conduct research, participate in laboratory internships, and pursue an excellent education. In fact, in 2010, the National Research Council reported that UConn civil engineering ranked in the top 10 percentile in student placement and UConn environmental engineering ranked in the top 10 percentile in diversity and in student outcomes.

We seek a faculty member that will be able to estimate the extent of physical damage to natural systems and man-made infrastructure caused by extreme weather events; a critical element for developing effective response and recovery plans. The targeted faculty will lead a research program that provides high fidelity physics based modeling to quantitatively predict the level of structural damage to trees and forests, power lines and towers, buildings and facilities, and other critical infrastructure due to hurricanes, tornados, storm surge, snow and ice storms, and other storm-related emergency events. The research will provide infrastructure owners, operators and decision makers with the technical information needed to deploy limited resources or space and time constrained assets to optimize infrastructure resiliency and preservation under multi-hazards. His/her research expertise will be in coupled multi-physics modeling with experience in natural hazards loadings on civil infrastructure. The new faculty member will work closely with weather forecasting faculty to integrate weather based load models with multi-physics structural models to provide quantitative damage prediction and assessment. The successful candidate will be expected to develop a vibrant externally-funded research program, pursuing a variety of traditional and non-traditional research funding sources; possess an enthusiasm for diverse and innovative teaching including distance learning courses at both the undergraduate and graduate levels; advise graduate and

undergraduate students; generate a scholarly publication record; and participate in technical committees and outreach activities.

The new faculty will collaborate with existing expertise in the Departments of Civil and Environmental Engineering (climate variability and change, hydrologic remote sensing, hydrologic modeling, groundwater hydrology and modeling), and Natural Resources and the Environment (forest management, hydrogeology), and Geography (Geographic Information Systems). He/she will make significant contributions to our on-going international education and research efforts that address critical water resource challenges in human sustainability and infrastructure security.

Minimum qualifications include: completion of all requirements for a Ph.D. in Civil Engineering or a closely related field with emphasis on applied mechanics or structural engineering by the time of appointment; the ability to develop and sustain a vibrant, nationally/internationally recognized and externally-funded research program; a documented record of quality teaching (Associate Professor) or demonstrated strong potential for teaching (Assistant Professor) in the undergraduate and graduate programs in their area of expertise or appropriate technical topics; and experience with (Associate Professor) or strong potential for (Assistant Professor) advising M.S. and Ph.D. students. Equivalent foreign degrees are acceptable.

Preferred qualifications include: a Professional Engineering license or the ability and intent to obtain one within two years; an undergraduate degree in civil engineering; professional experience in any area of applied mechanics and structural engineering; a record of research complementing and enhancing existing departmental strengths in applied mechanics and structural engineering; a record of publications in related technical areas; a record of obtaining and managing contract research (Associate Professor); the potential for collaboration with industry; and the ability to contribute through research, teaching, and/or public engagement to the diversity and excellence of the learning experience.

This is a 9-month tenure track position with an anticipated start date of August 2013. The successful candidate's primary academic appointment will be at the Storrs campus with the possibility of work at UConn's regional campuses across the state. Please visit Husky Hire at www.jobs.uconn.edu to submit curriculum vitae, letter of application, a brief statement of teaching and research interests, and the names of at least three references (with email, phone number and mailing address). The required submission format is a single PDF file in the order shown above. Review of applications will begin immediately and continue until the position is filled. (Search#2013108). The University of Connecticut is an EEO/AA employer. We encourage applications from underrepresented groups, including minorities, women, and people with disabilities.