**Assistant Professor – Advanced Building Technologies**

University of Massachusetts, Amherst

Amherst, MA

Full time

**Job no:** 510501
**Work type:** Faculty Full Time
**Location:** UMass Amherst
**Department:** Environmental Conservation
**Union:** MSP
**Categories:** College of Natural Sciences

**About UMass Amherst**

UMass Amherst, the Commonwealth's flagship campus, is a nationally ranked public research university offering a full range of undergraduate, graduate and professional degrees. The University sits on nearly 1,450-acres in the scenic Pioneer Valley of Western Massachusetts and offers a rich cultural environment in a bucolic setting close to diverse urban centers. In addition, the University is part of the Five Colleges (including Amherst College, Hampshire College, Mount Holyoke College, and Smith College), which adds to the intellectual energy of the region.

**Job Description**

The Building and Construction Technology (BCT) program in the Department of Environmental Conservation at the University of Massachusetts Amherst ([**http://bct.eco.umass.edu/**](http://bct.eco.umass.edu/)) invites applicants for a full-time, tenure-track position in the area of Advanced Building Technologies. This is an academic year appointment at the level of Assistant Professor.

We seek candidates with potential to achieve excellence in research and teaching in the areas of building technologies and building material systems with emphasis on innovation and sustainability to improve the way future generations build. The ideal applicants are interdisciplinary scholars with an understanding and interest in the responsible integration of built and natural environments. The successful candidate will be an enthusiastic instructor who applies rigorous research approaches and active learning strategies that enable students to analyze and solve complex problems in a global context.  Creativity and a team player attitude are highly valued. Candidates with backgrounds and research experience in any of the following (or related) areas are encouraged to apply:

* Offsite construction and prefabricated systems
* Industrialized construction and robotics
* Holistic, integrated, systems-based building design and construction
* BIM and big data in construction
* Additive manufacturing and generative design
* Drones, photogrammetry, VR/AR

These topics supplement our current research and teaching directions that center on building materials and structures with a strong focus on timber, building science and energy, and construction processes. The new faculty member is expected to collaborate with other departmental and BCT faculty but will also have opportunities to work with faculty from architecture, engineering, business, and other groups on campus like UMass Air (for drones) or the VR/AR group.

This tenure-track position has an appointment breakdown of 40% research, 40% teaching, 20% service. Teaching will consist of at least two three-credit courses per year and will be based on the new member’s background and BCT’s programmatic needs. The University of Massachusetts Amherst places special emphasis on faculty-student interaction and a commitment to teach and attract a diverse student body. The ideal candidate will have experience mentoring students from a wide array of backgrounds, including those traditionally underrepresented in science and technology fields. Service activities encompass advising and supporting an increasingly diverse student body as well as contributions to the university mission, to one’s profession, and to society.

**Requirements**

Candidates must have a Ph.D. in Building Science or Technology, Engineering, Architecture, or Construction or a related field*.* Relevant research experience and a publication record is required (in-press acceptable); a demonstrated ability to secure funding is desirable but not required. Candidates should demonstrate broad expertise in construction and building systems and specific mastery of their own research specialty. A candidate must have: excellence in oral and written communications; teaching experience (university level is desirable); aptitude for interdisciplinary problem solving; experience with information technology and construction software; and a passion for environmental stewardship in the built environment.

**Additional Information**

Building and Construction Technology (BCT) is one of the programs in the Department of Environmental Conservation (ECO) within the College of Natural Sciences and the School of Earth and Sustainability at UMass Amherst. We are co-located with the Departments of Architecture, and Landscape Architecture & Regional Planning in the UMass Olver Design Building, a internationally acclaimed sustainable mass-timber building on the Amherst campus.

Evaluation of application will begin on **December 1, 2021** and may continue until a suitable candidate pool has been identified.

Expected start date of this position is September 1, 2022.

Information for prospective faculty: [**https://www.umass.edu/prospective-faculty/**](https://www.umass.edu/prospective-faculty/)

**Application Instructions**

Applicants must submit a cover letter, curriculum vitae, statements of research and teaching, the names and contact information of three references, and a Statement of Contribution to Diversity, Equity, and Inclusion at: <https://careers.umass.edu/amherst/en-us/job/510501/assistant-professor-advanced-building-technologies>

The Diversity Statement should identify past experiences and future goals. These contributions may result from lived experiences, scholarship, and/or mentoring, teaching, and outreach activities. As part of a commitment to their own multicultural community, CNS seeks an individual with a demonstrated commitment to diversity and one who will understand and embrace university initiatives and aspirations (<https://www.cns.umass.edu/diversity-equity-inclusion>).

Search questions can be addressed to: Peggi Clouston, search chair, clouston@umass.edu.

*UMass Amherst is committed to a policy of equal opportunity without regard to race, color, religion, gender, gender identity or expression, age, sexual orientation, national origin, ancestry, disability, military status, or genetic information in employment, admission to and participation in academic programs, activities, and services, and the selection of vendors who provide services or products to the University.  To fulfill that policy, UMass Amherst is further committed to a program of affirmative action to eliminate or mitigate artificial barriers and to increase opportunities for the recruitment and advancement of qualified minorities, women, persons with disabilities, and covered veterans.  It is the policy of the UMass Amherst to comply with the applicable federal and state statutes, rules, and regulations concerning equal opportunity and affirmative action.*