

The Faculty of Architecture and Planning invites applications for the following full-time tenure-track position (40 hours per week), to commence on September 1, 2021 or soon thereafter:

University Assistant in “Evidence-based Design Support” – Tenure Track

in form of an initially fixed-term (6 years) tenure track position. The candidate and TU Wien can agree upon a tenure evaluation, which when positive, opens the possibility to change the position to Associate Professor with an unlimited contract.

Information technology and data-driven design and engineering processes are rapidly transforming the AEC sector. This development is paralleled by increasing emphasis on evidence-based and performance-oriented data-driven design to meet the increasingly complex requirements for planning and design of sustainable built environments.

To this end, the integration of a broad scope of domain knowledge and systematic, rational, and transparent reasoning methods and procedures are needed. Such methods must rely on sound processing of factual data and information. In the course of processing and utilizing such information, uncertainty aspects and risk management approaches must be taken into account. It is of vital importance for the faculty to intensify the efforts toward meeting the critical challenges of model generation and utilization in computational building design and operation support. This includes the need for seamless communication across multiple disciplinary domains as well as advanced multi-scale modelling.

In this context, the advertised tenure-track position has been created to further develop evidence-based design support methods (EDS) at the Institute of Architectural Science, to which the tenure-track position is assigned. The tenure-track position includes duties in research and teaching in the field of EDS.

TASKS

Research

Candidates are expected to be able to conduct fundamental research in one or more of the many research areas associated with the topic of EDS. Possible research areas for such specialization include:

- Evidence-based and performance-oriented building design
- Design Computation at areas of higher complexity
- Integration of scientific research methods in building-relevant computational design processes
- Information modelling across knowledge domains
- Multi-domain and multi-scale modelling

Teaching

Candidates are expected to have broad expertise in the subject domain and the ability to teach the subject at the undergraduate and graduate levels and co-supervise theses. As Bachelor-level curricula at TU Wien are mostly taught in German, respective language skills would be advantageous.

YOUR PROFILE

- + Completed doctoral or PhD studies (in Computer Science, Engineering, Architecture) corresponding to the employment described from a domestic or equivalent foreign university or research institution or achievement of an equivalent scientific qualification
- + Expertise in the field of evidence-based and performance-oriented building design support
- + Outstanding achievements and potential in research and/or innovative practice
- + Relevant experience in academic teaching
- + Ability to perform independent scientific work
- + Experience in formulating and implementing research projects, and the willingness and ability to lead research groups and to acquire third-party funding
- + International research experience is desirable
- + Social skills and ability to work as part of a team,

Ideally, the candidates have obtained one or more of the following qualifications or are experienced in:

- + Experience with EDS research or practice
- + Computational modelling at higher levels of complexity
- + Experience with computer-aided Integrative Design Support
- + Experience with evidence-based performance computing
- + Experience with inter-disciplinary research

TU Wien aims at increasing the share of women, in particular in management functions and in the scientific/artistic staff and therefore expressly encourages qualified women to apply. Female applicants who are equally qualified as the best qualified competing male applicant will be accepted by preference unless personal qualifications of a competing male applicant prevail.

We also endeavor to appoint people with special needs who have suitable qualifications, so they, too, are explicitly encouraged to apply. In case of any questions, please contact the confidant for disabled persons at the university (contact: Gerhard Neustätter, gerhard.neustaetter@tuwien.ac.at).

The employment starts as University Assistant with a minimum salary of EUR 3.945,90 gross (14 x per year) according to the collective bargaining agreement for a PostDoc. After signing the qualification agreement, the employment is as Assistant Professor with a minimum salary of EUR 4.666,30 (14 x per year).

Application Documents:

- + The application must include at least the following documents, besides a motivation letter and the curriculum vitae:
 - + Certificates of academic degrees
 - + List of scientific publications and projects, as well as experience and activities in academic teaching and training of young scientists
 - + Research concept with explicit reference to the bridging and communication functions between EDS methods and building design and operation practice and the relevant contribution to the scientific profile of the faculty and/or the university

We look forward to receiving your application (in German or English) by 10th of June 2021 by email (pdf format, one document only) to the following address: Dean of the Faculty of Architecture and Planning of the TU WIEN, Prof. Rudolf Scheuven → EDS@tuwien.ac.at