

University Assistant (Prae-Doc)



30 hours/week | Cover for leave of absence

TU Wien is Austria's largest institution of research and higher education in the fields of technology and natural sciences. With over 26,000 students and more than 4000 scientists, research, teaching and learning dedicated to the advancement of science and technology have been conducted here for more than 200 years, guided by the motto "Technology for People". As a driver of innovation, TU Wien fosters close collaboration with business and industry and contributes to the prosperity of society.

At the **Institute of Lightweight Design and Structural Biomechanics**, in the Research Unit of Lightweight Design, TU Wien is offering a position as university assistant (prae-doc) until 31.05.2026 for 30 hours/week. Expected start: June 2022.

Tasks:

- Collaboration in research and teaching at the Institute of Lightweight Design and Structural Biomechanics (ILSB), research unit Lightweight Design, in particular in the fields of nonlinear mechanics of materials and structures, optimization and numerical design, as well as machine learning in modeling, simulation and optimization
- Contribution to the scientific research of the ILSB as well as developing of own ideas and writing of a PhD thesis in one of the aforementioned fields, for example with focus on meta-materials and composites, their damage and fracture response, as well as structural stability
- Teaching of courses offered by the institute's Lightweight Design research unit; share of teaching according to the collective labor agreement

Your profile:

- Completion of a master or diploma curriculum in mechanical engineering, civil engineering, materials science, computational science and engineering (or similar fields) at an Austrian university, or an equivalent academic degree
- Required are very good skills in English (C1 according to GERS) for teaching and as working language
- Beneficial are very good German skills (C1 according to GERS) for contributions to German taught courses
- Required is sound theoretical and practical knowledge in (nonlinear) Finite Element Methods and continuum mechanics of solids
- Beneficial is knowledge in some of the following areas: numerical and analytical methods in lightweight design (fracture and damage mechanics, micromechanics of materials, structural stability theory, shape and topology optimization), machine learning, optimization methods, programming

We offer:

- Working in an internationally linked research team
- Attendance and presentations at international conferences as well as contributions to international, peer-reviewed journals
- Continuing personal and professional education and flexible working hours
- Central location of the workplace with very good accessibility (U1/U2/U4 Karlsplatz)
- A creative environment in one of the most liveable cities in the world
- Additional benefits for employees can be found at the following link: [Fringe-Benefit Catalogue of TU Wien](#)
- A project related complement to 40 hour/week can be envisioned

TU Wien is committed to increasing the proportion of women in particular in leadership positions. Female applicants are explicitly encouraged to apply. Preference will be given to women when equally qualified, unless reasons specific to a male applicant tilt the balance in his favour.

People with special needs are equally encouraged to apply. In case of any questions, please contact the confidant for disabled persons at the university, Mr. Gerhard Neustätter.

Entry level salary is determined by the pay grade B1 of the Austrian collective agreement for university staff. This is a minimum of currently EUR 2,294.00/month gross, 14 times/year for 30 hours/week. Relevant working experiences may increase the monthly income.

We look forward to receiving your application until 12.05.2022.



If you have any questions, please do not hesitate to contact us Carmen Keck | T: +43 1 588 01 406201 Here you can find also relevant information about the [application process](#).

TECHNOLOGY FOR PEOPLE

Furthermore, please note that applicants will not normally be reimbursed for travel costs incurred in connection with this admission process.