

The TUM Chair of Aircraft Design team is looking for full-time

Doctoral Researchers in Conceptual Aircraft Design

About us

As member of the department of Aerospace and Geodesy at the Technical University Munich the Chair of Aircraft Design is focusing on the design of manned and unmanned aircraft. The research is dedicated to the areas of „scenario analysis, future trends and technologies“, „aircraft design for civil and military operations“ and „operational analysis and evaluation“. The combination of these research focus areas provides an ideal platform for interdisciplinary research in design, simulation and experimental validation, including experimental flight testing.

Our common challenge

How may novel technologies influence new aircraft configurations to enable a sustainable aviation system? The quest for a climate friendly aviation as well as new capabilities of unmanned systems will lead to radically different aircraft of the future. In order to find promising combinations of technologies and integrating them into feasible future aircraft designs the TUM Chair of Aircraft Design is engaged in two initiatives: The in-house Aircraft Design BOx (ADEBO) and the cross-university UNICADO framework.

While ADEBO features the possibility to conceptually design a very wide spectrum of aircraft concepts, from civil transport class aircraft, via fighter aircraft down to unmanned aircraft, the UNICADO framework brings together the capabilities and expertise of the 6 leading German universities in a collaborative approach to derive new solutions towards a climate neutral aviation system.

Your contribution

Finding new promising future aircraft configurations will require a profound understanding of the interactions of the disciplines and technologies on aircraft, mission, and fleet level. To insert new technologies and systems, a high level of creativity and modelling capability is required. Therefore, you should bring a MSc. or Dipl. degree in aerospace or mechanical engineering well above average and you should have experience in designing, modelling, and assessing novel aircraft concepts. Fundamental knowledge of the key disciplines in aerospace engineering and especially in aircraft design is required. With these prerequisites and your interest in exploring the design space for future aircraft concepts you will join our conceptual aircraft design team and contribute to the projects and design frameworks in this field. Thus, you should be interested in cooperation with other groups, bring good communication, and writing skills in English to publish scientific papers.

Besides research activities you will also contribute to the lectures and organizational tasks of the institute.

We provide

Full-time researcher positions featuring a fixed-term contract with a salary in accordance with the German state regulated public service salary scale (TV-L E13) TUM is an equal opportunity employer. TUM aims to increase the proportion of women and therefore particularly welcomes applications by women. Applicants with severe disabilities will be given priority consideration given comparable qualifications.

Applications (until 15.06.2023) via:

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