

Join The Aviation Think Tank!



Have you ever wondered what tomorrow's air transport might look like? As the aviation think tank in Germany – consisting of young and ambitious experts from various disciplines – our goal is to provide science-based answers. Located in Taufkirchen near Munich, we offer a modern working environment with open ears and doors. We are always looking for passionate and creative minds to help us push today's boundaries to new heights. **Shape the future of aviation with us today and join us as:**

Student (m/f/d) in Aerospace Engineering for a Master's Thesis

Scope: Exploration of Propeller-Wing Interaction for Novel Aircraft Concepts

Your tasks:

- You will start with a literature review focusing on propellerwing interaction and modelling in conceptual and preliminary aircraft design
- With your gained insights you will assess tools for propeller design and calculation of propeller-wing interaction (e.g. XRotor, Lifting Line, Pawat)
- You will quantify the propulsive efficiency, lift-distribution, drag and maximum lift coefficient
- You will then compare these higher fidelity methods to lower fidelity methods and validate tools with appropriate data (e.g. X-57, Fokker F27 or data from our partners)
- The tasks also include the implementation of a suitable tool chain for preliminary aircraft design and the assessment of the D328H2 FC demonstrator configuration
- You will support the team by conducting trade studies

What to expect:

- International team with a high qualification I evel
- Acknowledged research institution with our feet on the ground and our thoughts in the air
- Interdisciplinary cooperation of engineers, natural and social scientists
- Modern working environment on the Ludwig Bölkow Campus in Taufkirchen near Munich
- A team-oriented working culture
- Flat hierarchies and short communication paths
- Challenging tasks
- Varied, creative activities

Your qualification:

- You are an enrolled university student (m/f/d) in Aerospace Engineering or a related field
- You are passionate about aircraft design
- You already have a very good knowledge of aerodynamics and you are familiar with the basic principles of propellers
- Additionally you possess first experiences in programming (preferable python)
- Your English is of high level both spoken and written

What we offer:

- Work-life balance due to flexible working hours
- Subsidised canteen and modern internal cafeteria
- Company sports (gymnastics, football, running group)
- Car park and good accessibility by public transport

We look forward to receiving your application! application@bauhaus-luftfahrt.net Please indicate the reference number 21-9-58. Do you have any questions? Michaela Richter will be happy to help: 2 +49 89 3074-84919 www.bauhaus-luftfahrt.net/en/career