

Munich Aerospace Open PhD Position

Strategic Challenges for Transport in Megacities: The Airport as an Intermodal Node

Context: Satisfying air transport demand efficiently and realizing seamless intermodal travel and transport chains from door to door are among the major challenges for future air transport developments. In order to meet future capacity and quality requirements, the Munich Aerospace research group „Aviation Management“ aims at the development of new innovative concepts for airports as intermodal nodes. To support future decisions on new airport concepts and processes, an interdisciplinary research team is set up with the objective to develop integrated assessment capabilities in this field. Scenario and trend analyses are employed to define sound strategic requirements for the air transport system, while simulation models of passenger, cargo and (air-) traffic flows are applied and linked to address all relevant system interdependencies.

Ph.D. topic: Dealing with long-term developments of the air transport system can provide the basis for evaluation and subsequently targeted optimisation of the overall system. The thesis addresses the role of air transport in an intermodal travel network as well as the accessibility of airports in growing urban areas. To this end, relevant drivers in the field of economics, technology, politics and regulation will be identified, analysed and structured. Different scenarios describing the future environment of the air transport system as well as the role and functionality of the airports in this system are drawn upon to set the frame for an evaluation of new intermodal transport concepts. Strategic challenges and risks for different stakeholders within the air transport system like passengers, cargo operators, airlines or airport operators will be analysed.

The project will be pursued in cooperation between **Technische Universität München (TUM)**, **Universität der Bundeswehr (UniBw)** and **Bauhaus Luftfahrt (BHL)**. The scholarship is located at the Economics and Transportation team at **Bauhaus Luftfahrt** in Munich.

Profile: The candidate should hold a Master's degree (or equivalent) in preferably economics and/or engineering. Relevant experience in the aviation sector is welcome, but not mandatory. A proactive and independent way of working, team spirit and willingness to interdisciplinary cooperation are required.

The Munich Aerospace scholarship is generally awarded for a **four-year period**. The monthly scholarship is **1,575 €** (taxfree under § 3 Nr. 44 EStG) based on the Munich Aerospace policy. The holder of the position is entitled to participate in training and courses at **Munich Aerospace graduate school**. Additional funding for conferences and publications can be granted.

Interested candidates should submit a full curriculum vitae, covering letter together with academic records to the email address given below.

Contact person: [Mara Cole](mailto:mara.cole@bauhaus-luftfahrt.net), Bauhaus Luftfahrt, Lyonel-Feininger-Str. 28, 80807 München,
Email: mara.cole@bauhaus-luftfahrt.net