TUHH AREA OF EXPERTISE: AVIATION & MARITIME SYSTEMS

Pioneering research through networking
PIONEERING RESEARCH THROUGH NETWORKING

Put together to be interdisciplinary, developed in a focused manner: the three fields of “aviation and maritime systems”, “green technologies” and “life science technologies” comprise the research expertise of the TUHH. “Aviation and maritime systems” highlights the strengths of the TUHH in the fields of aeronautical engineering, maritime systems and structures as well as logistics and mobility.

The TUHH has the perfect basis for research into the area of expertise of “aviation and maritime systems”, with global partners such as the airline manufacturer Airbus, the maritime industry and the port of Hamburg as a gateway to the world.

The field of logistics and mobility provides and researches the necessary underlying conditions for future-oriented logistics and transport systems. In this context, the combination of logistics and mobility issues, which are traditionally anchored in different disciplines, represents a unique approach. Compared to other providers of logistics education, the TUHH offers a unique combination of business and technical logistics, transport and mobility as well as management sciences. As part of this, research is being carried out at the TUHH to increase efficiency/capacity at logistics hubs and find alternative transport systems for goods requiring a complicated trans-shipment process.

Aeronautical engineers at the TUHH are researching various aspects of modern aviation with the purpose of developing new basic principles and technologies to aid with the development, production, operation and use of aeronautical systems. TUHH experts are undertaking research in the fields of aircraft systems, cabins and comfort, materials and production, as well as aircraft design and aeronautical transport systems. Being located in Hamburg offers excellent opportunities to work in direct contact with local system providers, suppliers and operators.

Under the umbrella of maritime systems and structures, new approaches for shipbuilding and marine technology are being investigated, and research is being carried out into the safe construction and operation of ships as well as achieving more cost-effective production processes and more efficient on-board systems. Furthermore, TUHH scientists are faced with the challenges that impact their research as a result of port and waterway construction as well as coastal protection. At the same time, other experts are devoting their efforts to the protection of offshore structures as well as new concepts for maritime transport.

"By working closely with both local and global partners, research questions can be addressed in a more targeted manner and solutions for urgent challenges found more quickly."

Prof. Dr.-Ing. Andreas Timm-Giel, Vice President of Research

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