

Flensburg University of Applied Sciences (FUAS) is seeking a

research associate in the field of control engineering

for a full time position. This is a fixed-term position (38.7 hours/week) ending on 31 December 2025.

The position is part of the project "*Adaptive Betriebsstrategien für bestehende Windenergieanlagen (ABBA)*" [Adaptive operating strategies for existing wind turbines].

The project aims to jointly develop adaptive strategies to operate existing wind turbines in a way that meets current and future challenges. The focus points are the integration of current energy prices, a Lidar-based wind forecast and a load monitoring as part of the operation. At the same time, the project aims to extend the lifetime of wind turbines, increase the energy output, reduce noise emissions and support the electrical grid through databased control. The strategies developed in the project will be tested on a 2 MW and on two 6 MW research plants.

Your main duties and responsibilities will include:

- the development of a Lidar-based feed forward with an improved wind forecast
- production of a reduced model, which is based on an aerolastic model, for the design of a state and wind estimator
- extension of the simulation environment in OpenFAST by integrating the wind forecast for primary strategies
- testing and comparison of the reconstruction of wind fields as well as testing of the optimal feed forward on a real wind turbine
- testing the optimal feed forward in a hardware-in-the-loop test stand
- participation in international and cross-tasks workshops and production of a recommended practices document
- management (project coordination)

Your qualifications and experience

As our future colleague you must fulfil the following pre-requisites:

- you have successfully completed a postgraduate degree, ideally in the field of control engineering or a similar field
- your communication and coordination skills are outstanding and you are a good negotiator both in German and in English
- your ability to think analytically is one of your strengths
- you are highly interested in writing and publishing academic papers

It would be desirable but not a must if

- You have knowledge of wind energy technology

What we have to offer

- depending on the successful candidate's personal qualifications the post will be remunerated up to TV-L level 13 (TV-L = German Federal States' Wage Agreement for Public Service Employees)
- 30 days of paid holidays per year
- reduced prices in the cafeteria
- reduced charges at the sports centre
- a broad range of free of charge further education possibilities at FUAS' Learning, teaching and language centre (LSZ) (English classes, didactics classes, key skills and competencies)
- a good working atmosphere in a family-friendly environment
- the opportunity to pursue your doctorate

FUAS encourages the inclusion of disabled people and will check whether vacant positions can be filled with disabled people, in particular with those registered as seeking work with the employment agency [Agentur für Arbeit]. Disabled applicants will therefore receive preference over equally qualified non-disabled applicants.

We want to promote a broad range of biographies and skills at our university. Therefore, we welcome applications regardless of the applicants' nationality, ethnic and social background, religious affiliation, age and sexual identity.

We welcome and encourage applications from all ethnic backgrounds. This also applies to applicants who speak Low German, Frisian or Danish.

We aim to create equal opportunities for women in all fields of employment. So in areas where there are fewer women employed than men, women will receive preference over equally qualified male applicants.

Unfortunately, this position is not suitable as a part time position.

This job ad is directed at people already working for the Land Schleswig-Holstein as well as external applicants.

Please e-mail your application including all the necessary documents (at least your CV, education and professional certificates, letters of reference from past employers, a motivational letter, any academic publications) to personal.bewerbungen@hs-flensburg.de; address it to Flensburg University of Applied Sciences – Hochschule Flensburg, the Chancellor, Sabine Christiansen, Postfach 15 61, 24905 Flensburg, Germany.

The application deadline is 31 December 2022 .

Please include all of your documents in your application, the documents should be sent in no more than 3 files in PDF format not exceeding a limit of 10 MB and including your name. If you send your application via post, please only send copies of the documents you are including as applications will not be returned.

We explicitly ask all applicants not to include a photograph in your application.

Your personal data will be processed for the purpose of your application based on § 85 para. 1 of the *Landesbeamten-gesetz* (Schleswig-Holstein's law on civil servants) and § 15 para. 1 of the *Landesdatenschutz-gesetz* (Schleswig-Holstein's law on data protection). For more information please refer to the document "Datenschutzinformationen für Stellenbewerberinnen und Stellenbewerber" (in German) on our [website](#) and our [privacy statement](#).

For questions related to the salary and contract please contact the Head of Human Resources, Dörte Schläger-Carstensen at +49 (0) 461 805 1519 or via e-mail at doerte.schlaeger@hs-flensburg.de. For questions related to the position itself and the tasks related to it, please contact Prof. Dr. David Schlipf at +49 (0) 461 4861 443 or via e-mail at david.schlipf@hs-flensburg.de.