

Aeroelastic simulation of small wind turbine using NREL-FAST code

In this project you will work beside other members of the student competition team for small wind turbine, and learn basics of wind turbine design, wind energy and work on the development of the current model in the open source "NREL-FAST" code and perform aeroelastic simulations including the standard functions such as start-up, shutdown and emergency stop.

Main tasks and requirements:

- Basics Blade Element Momentum (BEM) in small wind turbines
- Learning how to program using "FAST" code and perform simulations
- Preparation of the report of your work explaining the approach and discussion on the results
- Teamwork and communication with other team members
- Contribution to the final report of the team for the competition
- Contribution in preparation of the wind turbine
- Participation in weekly team meetings (online for remote students)
- Intermediate English knowledge or above

For more information about our team, please visit the page:

<https://www.hs-empden-leer.de/studierende/fachbereiche/technik/projekte/wind-challenge>

Contact person for application or more information:

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