

Modelling and simulation of heat transfer in small wind turbine

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 simulation of heat transfer inside the nacelle. The goal of this project is to model and simulate the heat generated by different sources such as the generator, brake system and electric boards. This project will help to design the appropriate cooling system.

Requirements:

- Heat modelling and simulations using Simcenter StarCCM+, OpenFoam or equivalent
- Preparation of the report of your work explaining the approach, solutions, and discussions on results
- Contribution to the final report of the team for the competition
- Contribution in preparation of the wind turbine
- Participation in weekly team meetings
- Teamwork and communication with other team members (online for remote students)
- Intermediate English knowledge or above

For more information about our team, visit the page:

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

Contact person for application or more information:

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