



Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our more than 2,500 employees in research, teaching, technology and administration a lively, family-friendly, equal opportunity environment, a lean management structure and diverse opportunities.

Join us to invent the future!

In the Faculty of Electrical Engineering, Computer Science and Mathematics at the Department of **Power Electronics and Electrical Drives (LEA)** Engineering a position as

Student assistant (f/m/d) or Research assistant (f/m/d) with Bachelor's degree (SHK or WHB depending on personal qualification)

in the scope of 9.5 up to 19 hours per week is open. Smaller work quotas are also possible by arrangement, e.g. to stay within marginal employment requirements. This is an employment initially limited to 6 months - an extension is presumed possible and desired.

Job description:

- Modelling of electrical power grids and grid components in Python (as ordinary differential and algebraic-differential equation systems)
- Solving the resulting initial value problems using available open-source numerical solvers
- Development of a command line-based interface for the design of arbitrary network topologies
- Contributing to the OMG (OpenModelica Microgrid Gym) toolbox (<https://github.com/upb-lea/openmodelica-microgrid-gym>)

Requirements of employment:

- Student of electrical engineering, industrial engineering, computer engineering, computer science or similar
- Prior knowledge in solving algebraic/ordinary differential equations
- Solid programming experience in Python
- Ideally pre-knowledge of power electronics and/or decentralized power grids

We offer:

- Self-dependent work process
- Cooperative surroundings
- Flexible work schedule (home-office possible)

For more information see:

lea.uni-paderborn.de

Applications from women are particularly welcome and, in case of equal qualifications and experience, will receive preferential treatment according to state law (LGG). Part-time employment is generally possible. Qualified disabled people (in the sense of the German social law SGB IX) are also encouraged to apply.

Applications with the usual documents and the **reference number 4463** should be sent to sekretariat@lea.uni-paderborn.de.

Information regarding the processing of your person data can be located at: <https://www.uni-paderborn.de/en/zv/personaldatenschutz>.

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