



## Master project on methods for steady state analysis of power grids (f/m/d)

At Hitachi Energy our purpose is advancing a sustainable energy future for all. We bring power to our homes, schools, hospitals and factories. Join us and work with fantastic people, while learning and developing yourself on projects that have a real impact to our communities and society. Bring your passion, bring your energy, and be part of a global team that appreciates a simple truth: **Diversity + Collaboration = Great Innovation**

In the Systems & Automation Group we perform cutting-edge research and look at various aspects of seamlessly integrating variable renewable resources such as wind and solar. We focus on the challenges and opportunities in the future scenarios in order to enhance grid flexibility and facilitate renewable energy proliferation. In this context, we offer a master student position which provides the opportunity of working on an interesting project in an international team of research scientists.

Our flexible work practices help you optimize personal and business performance while creating an environment where all employees can develop their skills and grow.

### Your responsibilities

Perform literature research

Model and analyze steady-state operation of grids with traditional and emerging technologies,

Develop new approaches for power flow analysis using state-of-the-art techniques,

Benchmark the developed approaches against modern open-source tools,

Self-driven execution of challenging tasks under stimulating supervision.

### Your background

Currently pursuing an M.S. degree in electrical engineering, control engineering, applied mathematics or a similar subject – official enrollment is essential,

Background in one of the following topics: steady-state analysis and modeling of power grids (e.g. power flow, optimal power flow, state estimation)

numerical methods and mathematical optimization,

Profound knowledge of and experience in Matlab and/or Python; familiarity with C/C++ is an advantage,  
Written and oral proficiency in English.

## More about us

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 38,000 people in 90 countries and generate business volumes of approximately \$10 billion USD. [www.hitachienergy.com](http://www.hitachienergy.com)

Interested in joining our team? If so, we look forward to receiving your full application (motivation letter, CV, references) only via our online careers tool.

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Talent Acquisition

Location	Baden-Dättwil,Aargau,Switzerland
Business Unit	Business Function Technology
Publication Start Date	17.03.2022
Job Function	Research and Development
Publication ID	CH52879011_E1