



We offer a Diploma / Master's Thesis:

EDU Thermal Development (f/m/d)

1D/3D-Simulation Methodology Development

Along with increasing complexity and demands of modern vehicles, further development and research of powertrain components is becoming more and more challenging and complex. To support this development simulation-based methodologies and functional modelling methods are utilized.

TASKS

- Postprocessing of measurement results from hardware EDU tests.
- Build-up of a functional EDU consisting of an electrothermal network model and cooling fluid circuits based on 1D- and 3D-simulation methodology.
- Development of simulation methodologies for calibration of the models and comparison with test data.
- System analysis with focus on optimization and performance improvement.
- Documentation of the work and presentation to the team members.

FIELDS OF STUDY

- Mechanical Engineering
- Automotive Engineering
- Physics
- Or similar field

REQUIREMENTS

- You are interested in EDU thermal management and vehicle powertrains.
- You are interested in electrothermal analysis by means of numerical modelling and simulation.
- Basic knowledge in fluid dynamics, thermodynamics, 1D- and 3D-simulation methods and control theory (appreciated).

Remuneration: The successful completion of the thesis is remunerated with a one-time fee of EUR 3,500 before tax. Preferred start of the thesis is September 2024.

CONTACT

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