Reference Number: 50023_BE_19

# Master Student (m/f/x) Battery System Engineering

Location:

Germany, Aachen

Worktime:

Full-time

## Tasks

We offer a thesis (Master) in the field of battery system development and circular economy to answer the following research question: "How does the new EU directive on battery recycling influence the total cost of ownership of EVs".

The introduction of the battery passport with the compulsory disclosure of information for the battery reuse, the gradual increase in recycling efficiency for key raw materials as well as the introduction of recycled active materials poses challenges which potentially increase the cost of development, production, logistics and disposal of automotive batteries on one hand, on the other hand opens the possibility of exploiting circular lifecycles.

The proposed thesis, shall investigate these topics with help of case studies, which are technically and economically reasonable. The focus here is on the combination of technical specifications and economic considerations.

## Qualification

The open position is particularly suitable for students of electrical and mechanical engineering, especially in combination with economics. Prior experience in the following areas is useful for successful completion of the master's thesis:

General design of electrical powertrains.

- Required soft skills:
- quick comprehension
- independent way of working
- working well in a team
- interest in publishing research papers

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## DATA PROTECTION FOR APPLICANTS

Here you can find our current privacy agreement for applicants: FEV Data Protection for Applicants