LONG-TERM PLANNING IN MAGDEBURG



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E-mobility

In the state capital of Magdeburg, electromobility has been employed on the railways since 1899 and has also been part of everyday life on the streets for several years. Mechanical engineering, e-mobility, and logistics are distinctive and innovation-driving sectors of the state capital. Traditional companies, hidden champions, exciting start-ups, and global players all come together here to shape and explore the future of logistics and mobility in a close exchange of ideas. From recycling generators to disruptive bicycle frame designs, from immersive virtual planning environments to autonomous driving, the location offers attractive partners and new business opportunities. Magdeburg is very centrally located in Central Germany and Europe. Automobile manufacturers such as Volkswagen, Daimler, BMW, and Porsche, as well as five gigafactories, are all within a radius of less than 150 km.



46
publicly accessible charging stations (24 hr) with a total of 86 charging points*

of all newly registere cars are electric or partially electric*

*(As of March 2022)

334 private charging stations for electric cars

Excellent courses in mechanical engineering,

*(As of 2020)

Examples of applications

- For the "Paket-KV-MD2" project, a total of four e-cargo bikes known as "parcel rockets" made by the Berlin start-up ONO with a micro-depot are used for the last mile of parcel deliveries.
- Autonomous cargo bike AuRa The cargo bikes will drive independently and considerately on designated cycle paths and follow the road traffic regulations
- Elbi the first electric shuttle bus. The shuttle bus is designed to close the gap in local public transport on the "last mile"

Research & Education

- The Fraunhofer Institute of Factory Operation and Automation (IFF) with the entire business segment: "Energy Systems and Infrastructures"
- Otto von Guericke University Magdeburg (Institute of Electrical Energy Systems; Institute of Mobile Systems; Institute of Logistics and Material Flow Technology (ILM))
 Institute of Electrical Engineering at the Magdeburg-Stendal

— Institute of Electrical Engineering at the Magdeburg-Stendal University of Applied Sciences

— Energy Conversion Systems Group at the <u>Max Planck</u> <u>Institute</u> of the Dynamics of Complex Technical Systems

Ifak: Institute of Automation and Communication IKAM: Institute of Competence in AutoMobility

— <u>CMD: Center for Method Development</u> (launching 2023, financing €31 million)





Modern research infrastructure

and computer science

Degree

programmes

e-mobility at the OVGU

Separate degree programme in

electrical and industrial engineering,

— Galileo test field

 State initiative with the aim of supporting and promoting development and innovation in the transport, mobility, and logistics sector in the state of Saxony-Anhalt.

The Magdeburg region as an experimental space for mobility solutions — a joint project of the Otto-von-Guericke University and the Saxony-Anhalt local transport service company (NASA). New results and technologies from research will be tested and implemented for mobility and living/future living



Strong networks MAHREG Automotive Cluster

Magdeburg is a city of progress. At first glance it may look a bit monotonous, but at second glance reveals an incredible variety of innovations, excellent research institutions, dynamic companies, and exciting start-ups. This city is shaping the future of sustainable (e-)mobility. Magdeburg is home to companies that completely redefine the bicycle frame, conduct cutting-edge research on autonomous cargo bikes, and pursue outstanding developments in new approaches to sector coupling, with the aim of intelligently linking transport and energy. As a city, Magdeburg is a "hidden champion" in e-mobility.

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