

RESEARCH FOR TRANSFORMATION

SOLUTIONS FOR TOMORROW



WHO WE ARE

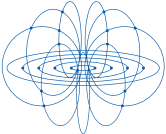
We are a young, dynamic and international university with a clear focus on scientific excellence, innovation, entrepreneurship and sustainable development. We are tackling major challenges such as the digital and ecological transformation, the future of health care, mobility and artificial intelligence. In doing so, we support our regional transformation from a coal-mining area to a science hub.



BTU is located in Lusatia (Lausitz), a part of East Germany, 130 kilometres southeast of Berlin. About 40 percent of our doctoral students come from abroad. We offer young researchers support in their scientific career development and we invite everyone to join us in our mission to drive sustainable progress, not just in our region but world wide.

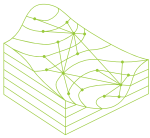
WHAT WE DO

In our four priority areas, we strengthen basic and applied research by expanding our research profile and promoting synergies to address the major challenges of our time.



ENERGY TRANSITION
AND DECARBONISATION

The energy transition is a major global challenge requiring fundamental changes to our energy systems. We develop technical solutions in energy generation, storage, smart grids, low carbon industries, and future mobility.



GLOBAL CHANGE AND
TRANSFORMATION PROCESSES

Structural transformation extends beyond economics, shaping society, settlement patterns and demographics. Our interdisciplinary research spans environmental science, climate change, post-mining landscapes, urban planning, and social acceptance.



HEALTH AND
LIFE SCIENCES

In health and life sciences, we research digital healthcare, smart sensors, human-machine interaction and next-generation therapeutics. Our programmes strengthen the Lusatian health region and train future experts for industry and science.



ARTIFICIAL INTELLIGENCE
AND SENSOR TECHNOLOGY

Artificial intelligence and sensor technology are two main topics at the university. As central research and transfer topics, they strengthen the innovative and competitive ability of companies and research institutions. Our focus is on both basic and applied research.

OUR PROJECTS

With numerous major research and transformation projects, our researchers join forces for knowledge creation and societal impact. Here are some of them:

Center for Hybrid Electric Systems Cottbus (chesco)

Chesco conducts research into hybrid-electric and electric systems for aviation and the mobility sector.

» www.b-tu.de/en/chesco



Dependable Smart Energy Systems (DENSE)

At DENSE, young scientists are researching robust, reliable technology for smart energy systems (SES).

» www.dense-dn.eu



Energy Innovation Center (EIZ)

The EIZ conducts research into technical, economic and social solutions for a climate-neutral energy supply.

» www.b-tu.de/en/energie-innovationszentrum



Pressurized Efficient Alkaline Electrolyser (PEACE)

PEACE is developing a highly efficient, cost-effective AEL system for a sustainable energy future.

» www.h2peace.eu



Reusing precast concrete for a circular economy (ReCreate)

ReCreate aims to close the concrete cycle and reduce CO₂ emissions and energy consumption.

» www.recreate-project.eu



Construction as cultural heritage (SPP 2255)

In this priority programme around 70 researchers from 19 institutions are working to examine buildings of the high modern era.

» www.kulturerbe-konstruktion.de



OUR PARTNERS

We are actively involved in regional, national and European networks that enable us to work across borders and promote interdisciplinary research with both local and global impact. We currently maintain 20 partnerships with non-university research institutions and 24 joint appointments.



European University for Customised Education (EUNICE)

EUNICE connects 10 partner institutions to address global challenges and enhance student mobility and academic exchange.

» eunice-university.eu



Lausitz Science Network (LSN)

By promoting collaboration and knowledge exchange, the network contributes to the region's visibility and strategic positioning for research and innovation.

» www.lausitz-science-network.de



Lausitz Science Park (LSP)

The LSP is developing a cosmopolitan future quarter for business and research, thus creating an internationally visible innovation ecosystem.

» www.b-tu.de/en/lausitz-science-park



Cluster Decarbonisation in Industries (CDI)

The CDI drives the transition to net zero by connecting expertise and fostering solutions across science, business, politics, and administration.

» www.cluster-dekarbonisierung.de/en



Network for Industrial Additive Manufacturing (MGA)

MGA unites over 120 players from all areas of the market to jointly boost additive manufacturing.

» www.mga-net.com

Collaborate with us in finding solutions for tomorrow.

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