



TECHNISCHE UNIVERSITÄT  
CHEMNITZ

International Master's Programme

## International Master's Programme Merge Technologies for Resource Efficiency



**THINK  
BEYOND  
LIMITS**

# THINK BEYOND LIMITS

**International Master's Programme**  
Merge Technologies for Resource Efficiency



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## One global challenge Six challenging approaches

Resource efficiency is a challenge for modern business, science and technology. In a world of scarce natural, economic and human resources, your knowledge will be a key asset. Studying the International Master's Programme **Merge Technologies for Resource Efficiency** you will gain expertise for developing multi-approach solutions to conserve resources and achieve higher efficiency compared with conventional technologies.

The International Master's Programme links world-class teaching with the latest research in future key technologies for sustainable and resource-efficient production. It is based at Technische Universität Chemnitz in the heart of Europe.


# International.

A woman with long dark hair, wearing a purple sweater, is focused on a task in a laboratory. She is holding a small electronic component with a blue ribbon cable. In the background, other people are working at computers, and a computer monitor displays a technical diagram. The scene is lit with cool blue and yellow tones.

The International Master's Programme Merge Technologies for Resource Efficiency is ...

You will study in multicultural teams and develop common solutions for specific issues. As an international student we will support you ensuring that you make the most of your stay in Chemnitz, academically and personally. In consideration of your different academic and cultural backgrounds, we offer you individual guidance and consultation for successfully preparing and completing your personal course of study.



A woman with short brown hair is seated in a car simulator, wearing a VR headset. She is holding the steering wheel and looking forward. The simulator's dashboard features a small screen displaying the text "Freies Fahren!". The background shows a virtual city street with buildings and trees. A white text box is overlaid on the right side of the image.

Studying our International Master's Programme you will gain expertise in industrial planning and production, consulting and research. Furthermore, working on your soft skills will help you make responsible decisions based on multiple perspectives. At Technische Universität Chemnitz you will benefit from a long-established tradition of excellent research and teaching in natural sciences, engineering and economics. You will build strong ties with innovation leaders in industry and business.

# Integrative.






# Innovative.

The International Master's Programme Merge Technologies for Resource Efficiency is ...

You will be the first to provide much-needed expertise in a field that is both full of pressing scientific, technological and economic issues and simultaneously offering plenty of opportunities. New methods in learning and teaching will support your creativity and will open new perspectives for developing new ideas.



You will think beyond boundaries and connect to outstanding research projects across multiple faculties. With your background in natural sciences, business or engineering you will benefit from a tailor-made degree programme. In accordance with your interests and in close collaboration with our course guidance you choose one out of six available study profiles:

**Lightweight Structures | Smart Systems and Structures | Simulation and Optimisation | Life Cycle Engineering and Management | Nanotechnology and Interfaces | Chemical Production Technologies**

# Interdisciplinary.



# Master's Programme Merge Technologies for Resource Efficiency

With the International Master's Programme Merge Technologies for Resource Efficiency you will enrol in a unique master's degree programme. After completing your degree you will be able to work in the fields of industrial and academic research and development, in technology driven companies and the consulting branch.

Successful applicants generally have gained their bachelor's degree in natural sciences, engineering or economics. Our Student Advisory Service offers you individual guidance to choose the right course of study in compliance with your expertise and future perspectives.

## Curriculum

		Semester	
Master's Project and Colloquium		4	30 CP Master's Project and Colloquium
Profile specific Content in Resource Efficiency	Optional Courses	3	20 CP Profile specific Content in Resource Efficiency 10 CP Optional Courses
	Interdisciplinary Research Project	2	20 CP Profile specific Content in Resource Efficiency 10 CP Interdisciplinary Research Project
Resource Efficiency by Merge Technologies	Scientific Methodology	1	20 CP Resource Efficiency by Merge Technologies 10 CP Scientific Methodology

## Profiles

Merge Technologies for Resource Efficiency	Lightweight Structures
	Smart Systems and Structures
	Simulation and Optimisation
	Life Cycle Engineering & Management
	Nanotechnology and Interfaces
	Chemical Production Technologies



# Facts and Dates

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**Start of master's programme** Every year in October

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**Final date of application for international students** 15th July for winter semester

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**Degree** Master of Science (M.Sc.) with Diploma Supplement

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**Period of master's programme** Four semesters over two years for full-degree students (also open for short-term students)

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**Application** All application details can be found here: [www.tu-chemnitz.de/admission](http://www.tu-chemnitz.de/admission)

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**Language proficiency** B2 in German and B2 in English (Common European Framework of Reference for Languages, CEFR)

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The project house „METEOR HUMAN-TECHNOLOGY-ORGANISATION“ was built in 2011. Here, interdisciplinary teams of scientists and industrial representatives investigate the impact of change in people, technology and organisation.



TECHNISCHE UNIVERSITÄT  
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## More about Technische Universität Chemnitz

Technische Universität Chemnitz lies in the heart of Europe. It is a campus university with world-leading research on Energy-efficient Production Processes, Human Factors in Technologies, Intelligent Systems and Materials. Its 11.000 students are enrolled in a range of bachelor's, master's or PhD programmes. With its interdisciplinary courses of study, its strong link between teaching and research and its outstanding student-to-professor ratio Technische Universität Chemnitz is an excellent environment to study.

**APPLY  
NOW**

**International Master's Programme**  
Merge Technologies for Resource Efficiency





**DFG** Deutsche  
Forschungsgemeinschaft



TECHNISCHE UNIVERSITÄT  
CHEMNITZ

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