

MEM MASTER IN MECHATRONICS

a cooperation of
Zittau / Goerlitz University of Applied Sciences
DCG Halle e.V. – International Institute –



Hochschule
Zittau/Görlitz
UNIVERSITY OF APPLIED SCIENCES

DCG

Halle e.V.

INTERNATIONAL INSTITUTE

STUDENT INFORMATION



study

The research profile of the Zittau / Goerlitz University of Applied Sciences has two focus areas: Energy and Environment and Transformation in Industry and Society.

WHY WOULD YOU JOIN A COOPERATIVE STUDY PROGRAM WITH THE ZITTAU / GOERLITZ UNIVERSITY OF APPLIED SCIENCES?

The Zittau / Goerlitz University of Applied Sciences (HSZG) offers scientifically grounded academic education to ensure a successful career start and professional development. To actively contribute to a sustainable world, HSZG focuses on practical-oriented scientific research and development in its core competence areas of "Energy and the Environment" and "Transformations in Industry and Society".

HSZG students obtain relevant discipline-specific, methodological, human resource-oriented and social competences to manage change in the academic areas of: engineering and technological sciences, natural sciences, social sciences, economic and business studies as well as languages and linguistics.

HSZG's quality of research is known nationally and internationally and is rewarded with external funding, but finds expression also in doctoral projects and various publications in specialist disciplines.

The Mechatronics Master (MEM) is offered within the Faculty of Electrical Engineering and Computer Sciences in Zittau.

Students who study the Mechatronics Master will study one year at their university and the second year at Zittau / Goerlitz University in Germany. The program in Germany will be entirely in English language.

A German Master Degree will improve job opportunities for students, especially applying in German companies located all over the world. Students will get insights into the German culture, including the German "values" for quality, structure and sustainability. Thus, students can support to build bridges between cultures in their future roles.

History

The history of HSZG traces back to 1836 when it was established as Royal School of building trades of Saxony. After the World Wars functional buildings, scientific research and teaching materials as well as outstanding experts led to the foundation of universities and universities of applied sciences in Zittau and Goerlitz, which became leading edge in the former GDR (East Germany). Following the high practical orientation of the existing universities, their quality and the estimated demand for university graduates, the Zittau/Goerlitz University of Applied Sciences was established with two locations after the German reunification.

Facts and Figures

The HSZG has 3,100 students whereof 500 are foreign students from 33 nations, 6 faculties, 42 courses of study, 120 professors, 7 research institutes and 3 service centers.

The HSZG has six faculties

Electrical Engineering and Computer Sciences

Managerial and Cultural Studies

Mechanical Engineering

Natural and Environmental Sciences

Social Sciences

Business Administration and Engineering

Seven research institutes

Education, Information and Communication (BIK)

Health, Ageing, Technology (GAT)

Surface Technology (IOT)

Ecology and Environmental Protection (IÖU)

Process Technology, Process Automation and Measuring Technology (IPM)

Transformation, Habitation and Social Space Development (TRAWOS)

Process Development and Research into Peat and Natural Materials (ITN)

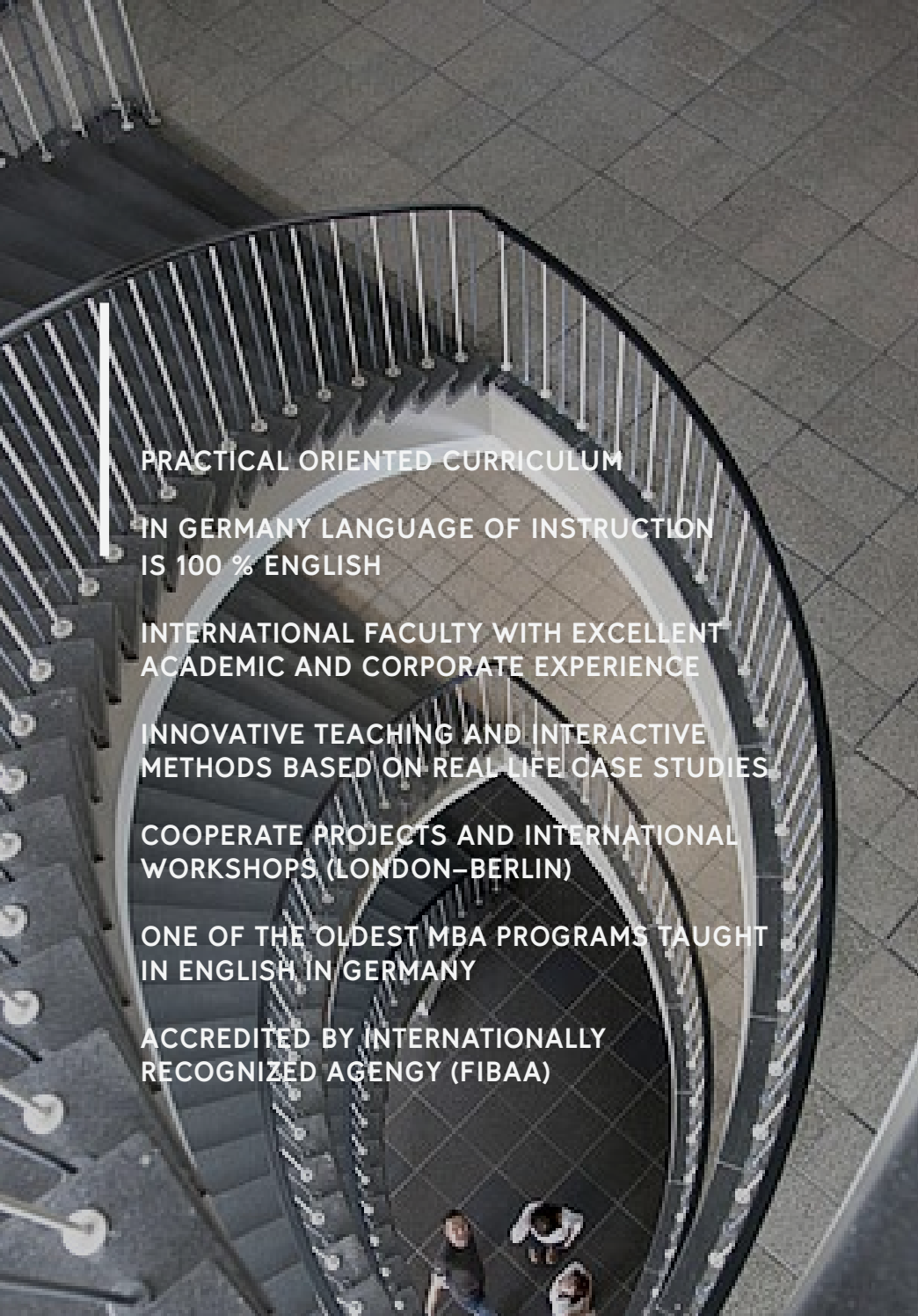
Three service centres

Centre of knowledge and technology transfer

Centre of communication and information

Centre of e-learning





PRACTICAL ORIENTED CURRICULUM

IN GERMAN LANGUAGE OF INSTRUCTION
IS 100 % ENGLISH

INTERNATIONAL FACULTY WITH EXCELLENT
ACADEMIC AND CORPORATE EXPERIENCE

INNOVATIVE TEACHING AND INTERACTIVE
METHODS BASED ON REAL-LIFE CASE STUDIES

COOPERATE PROJECTS AND INTERNATIONAL
WORKSHOPS (LONDON-BERLIN)


ONE OF THE OLDEST MBA PROGRAMS TAUGHT
IN ENGLISH IN GERMANY

ACCREDITED BY INTERNATIONALLY
RECOGNIZED AGENCY (FIBAA)

WHY WOULD YOU BE INTERESTED IN STUDYING A MASTER IN MECHATRONICS?

This Master is a quality German Master recognized worldwide. The mainly application-oriented Master Degree is done in the interdisciplinary technical study course "mechatronics" which is based on the classical disciplines of mechanical engineering and electrical engineering combined with the knowledge areas of electronic engineering, automation technology and computer science.

As a Master of Engineering you are able to adapt to changing activities in working life based on your acquired knowledge in accordance with the state-of-the-art in science and technology and to handle the interdisciplinary tasks in the applied science, development and production in mechanical engineering, automation technology, electronic engineering and informatics and to take-over managerial positions.



WHAT KIND OF CAREER DOES THE MASTER MECHATRONICS PREPARE YOU FOR?

Students receive a national and international accepted Master Degree. With the Master of Engineering in Mechatronics, the students are offered a broad range of opportunities.

Field of activities

Doctoral studies for the Dr. Ing.

Research and development

Official expert

Technical Director

Chief Engineer

Engineer in projecting and development

Professional perspectives

Companies in electrical and electronic engineering and mechanical engineering which develop or produce innovative products, machines, devices and/or plants with a high percentage of automation technology

Smaller companies, especially in the areas of device development and special machine construction

Commissioning, Service / Sales, Maintenance and reconstruction of machine systems and industrial plants

Official expert in private and public institutions

Benefits of studying at HSZG

study in the beautiful, quiet and green town of zittau (germany)

receive an internationally highly recognized degree as master of engineering

high quality of education and laboratories resulting from numerous research projects with leading industrial companies

study with high practice relevance

in germany, you are taught 100% in english

profit from the innovative cooperation programme (4+1) and receive your international master degree in 5 years

as a symbiosis of electronic and mechanical engineering as well as computer science this master offers you various possibilities for your career start

enjoy innovative teaching and interactive methods

enjoy your opportunities travelling through europe with your german resident permit in the year of study

HOW IS THE PROGRAM STRUCTURED?

WHO SHOULD APPLY TO THE MASTER MECHATRONICS PROGRAM AT ZITTAU / GOERLITZ UNIVERSITY OF APPLIED SCIENCES, GERMANY?

What admission requirements do I need to fulfill?

- Academic degree (Bachelor)
- Motivation, aptitude interview if needed
- Professional interview in English with representatives of HSZG between March and April (required for APS in China and Vietnam)

Do I need to prove my language proficiency in German?

Please note, in Germany, the Mechatronics Master program is taught entirely in English, German language is NOT required, however German language courses will be offered.

Do I have to prove my English proficiency?

Yes, you need to prove your proficiency in English. The Mechatronics Master program refers to the Internet based TOEFL in general. However there is a various number of adequate language tests. It is important that the results out of these tests are equivalent to the scores given here. The following scores refer to 79/79 points TOEFL iBT:

- TOEFL iBT, 79 internet based
- TOEFL pBT, 550 paper based
- TOEFL cBT, 213 computer based
- IELTS, 6.0

The Master Mechatronics is structured into 3 semesters (90 Credits). It starts each year in the Winter Semester (October).

The program consists of compulsory and electoral compulsory modules.

Compulsory modules are done by the University of Applied Sciences, if the partner university has not the capacity or capability to do it.

Their main focus is on Artificial neural networks, Modern methods for control and feedback control systems, Image processing, Numerical analysis and simulation, Project work.

Compulsory modules

Business Management / Languages

Fuzzy Control

Hardware–Oriented Programming / Circuit Design

Structural Dynamics

Machine Dynamics

Model–Based Measuring Methods / Nonlinear Dynamic Systems

Automatic Control II

Digital Signal Processing

Digital Communication Technology

Image Processing

Artificial Intelligence / Neural Networks

Electoral Compulsory modules have to be fixed by the partner university. Each compulsory module is worth 5 credits.

Electoral Compulsory modules

Magnet bearing technology II

Quality assurance

Optical transmission systems

Water and wind energy utilization

Optical sensors

Photovoltaic

Close-processor Programming /
Programming in C

Information theory

Signals and systems

International Project

In total the partner university has to deliver modules worth 30 credits. At HSZG students do modules worth 30 modules and write their Master thesis and hold their Master Defence. Master thesis and Defence sum up to 30 credits.

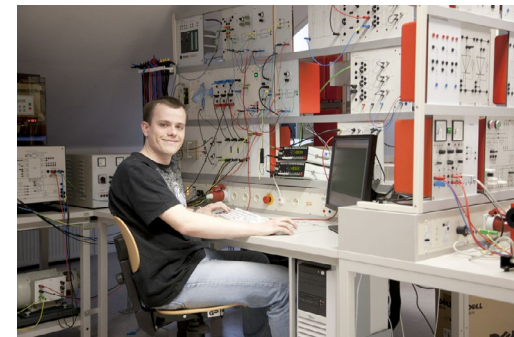
Which modules are done at HSZG and which ones at the partner university?

This depends on the capacity of the partner university and has to be defined individually. The partner university has to teach 6 modules à 5 Credits. They can do parts of the compulsory modules as well but can also choose to do only the electoral compulsory modules.

Will HSZG lecturers come to teach at the partner university?

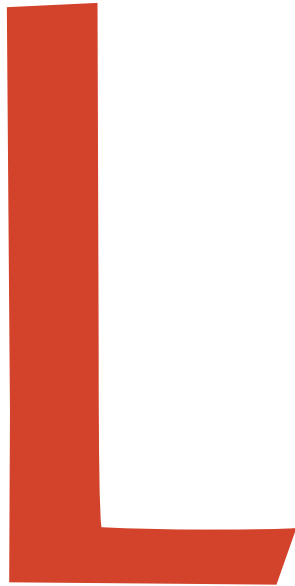
This is not planned but may be possible in block seminars. Here, individual agreements can be done.

1+2 Mechatronics laboratory at Zittau / Goerlitz University of Applied Sciences Campus



live

A small city that offers all amenities for good student life.



WHAT IS LIFE IN ZITTAU LIKE?

Zittau is an idyllic town that is rated among the most beautiful cities in the Federal State of Saxony, Germany. Its cityscape is rich in signs of past prosperity, which was mainly shaped by the trade, the cloth making and the art of brewing.

Important sights of Zittau are the market place with its impressive town hall, the 7-floor salt house built in the early 16th century, Baroque fountains and the former Franciscan monastery.

The cultural landscape of Zittau is both traditional and modern. Zittau offers leisure and sport facilities, museums and parks and biking ways.

Although a relatively small city with only 26.500 inhabitants, Zittau offers a lot of amenities for its inhabitants. In the city, people can do almost all errands by foot but also with the car, bus or bike.

Zittau is a green city with lots of parks, clean and clear air and during the night you can see the many stars in the night sky.

Interesting cities to visit

Dresden (110 km)
Prague (130 km)
Berlin (260 km)
Frankfurt/Main (580 km)
Munich (530 km)

ENSURING
PEACE OF MIND FOR
OUR PARTICIPANTS



support

By solving all the administrative tasks for students, DCG ensures that students can fully concentrate on their studies in beautiful Zittau.

ADMINISTRATIVE INFORMATION

What do I need to do to get my visa?

The German partner of the cooperation, the DCG Halle e.V. – International Institute, is giving a big support in the whole visa application process for the program students.

Program students participate in the APS group processing (applies for China and Vietnam) and only need to go personally to the German Embassy for giving their finger prints.

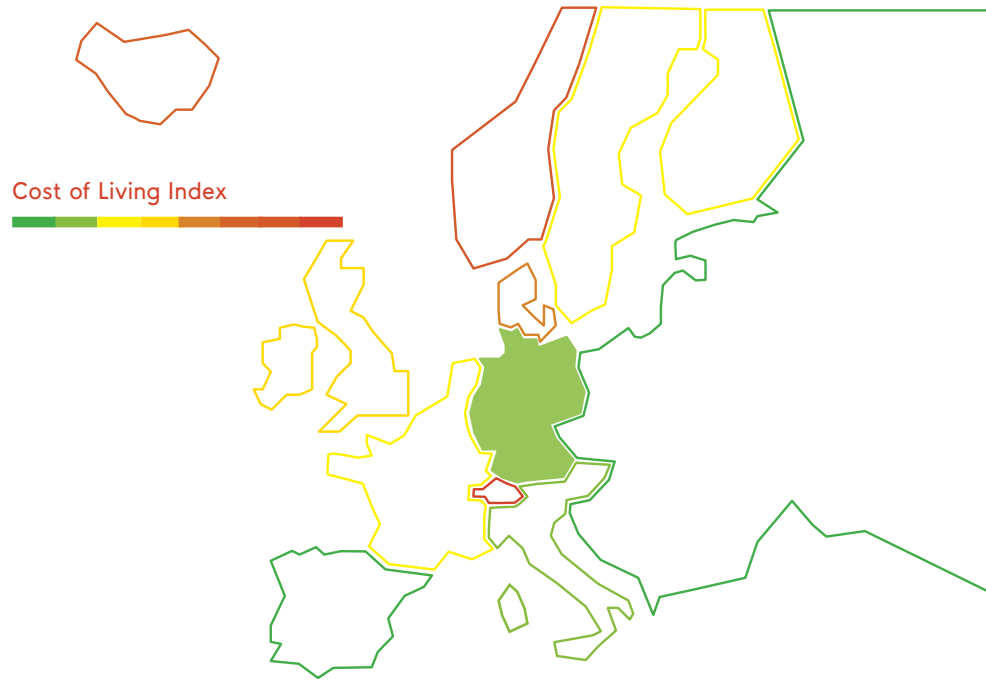
What students need to do is an interview in English at the partner university

with a representative from the HSZG to prove their academic ability for the course.

And all payments (tuition and cost of living) have to be done prior to visa application.

Who is supporting me in Germany when I have problems not related to academic issues?

DCG Halle e.V. – International Institute is supporting in all administrative issues when students are in Germany.



WHAT COST ARE INVOLVED FOR ME?

Cost of living in Germany

When students come to Germany, they have to show their financial ability for studying in Germany. For this, they have to show to the German authorities that they possess 8.640 € (actually from 2018) for their cost of living (one year) before DCG handles their Visa application process. The amount is coupled to the German BAFÖG (study support regulation) defined by the Ministry for Education and Science.

DCG handles all the administrative tasks, listed below, for students coming to Germany.

From the yearly costs of living you have to finance

1. Fees and costs for entry and stay, registration formalities, visa application, permit of residence, bank accounts, insurance certificates

2. Fees and costs for accommodation (student hostel, living community), rent from October–September (including advanced payment for heating, water, electricity etc.), internet access, equipment of the apartment

3. Security deposit for safety bond to the foreigner registration office, rental bond (repayment after finalization of the stay resp. rental contract)

4. Charges and dues
University semester fee

For our program students we can offer better deals (1.+ 2.) that include better services and lower fees.
Remaining balance is their monthly "pocket money" divided by 12 month.

Study service fee

→ Please ask your university for the study service fee involved for this program.

HOW EXPENSIVE IS STUDYING IN GERMANY?

Cost of living

Compared to other Western European countries Germany has a relatively low Cost of Living Index (65.54) and is placed on rank 16.

Related to the reunification of Germany more than 25 years ago, there is an additional difference between the Western and Eastern part of Germany.

In the average the living cost in East Germany are around 20 % lower as in West Germany, especially in big cities, i.e. a student in Munich must pay between 400–500 € for a single room in a community, our program students who study at the DCG partner university in Zittau pay for the same around 230–250 €.

Studying on a German campus is even cheaper.

Example for campus prices:

A meal at the campus Mensa costs 1,50–3,00 €

0.5l of beer in a campus club

costs 2 €

1kg of bread is available for 1,30 €

Studying a Master in English language in Germany is very cheap related to the fees and living costs in U.K or other Western European countries.

Will I live on my own or do I have to share my room?

Most students live in a shared apartment. They have their own room but share bathroom and kitchen.

Studying in Germany is, "free of charge", why do we have to pay program fee?

The Mechatronics Master program is a partner program between the HSZG and your university. The HSZG is providing additional capacities next to its normal teaching agenda. The classes are designed to meet the special requirements of foreign students of the partner programs who got a study place to continue their study at the HSZG.

Furthermore, students receive individual guidance during their studies and professional assistance for bureaucratic procedures (visa, insurances, accommodation) during their stay in Germany.

Students can always apply at any German university directly.

However, places for foreign students are limited and a place is given at availability and often bound to a "numerus clausus".

Students also have to apply for their visa themselves and have to do their interviews for proof of English proficiency at the German Embassy in their country.

Furthermore students would have to take care for health insurance, flat, registration at different German authorities, bank accounts on their own.

Even though students pay fees, the program is set up to save time and money for them compared to the conventional ways, as they get into a paid job faster than their peers in conventional programs.

Are students allowed to work in Germany while they study?

Work is permitted in the time of the university study, but opportunities for foreign students are restricted. You would only be allowed to do a very limited number of hours per week. In total foreign students can work during their study 180 half days per year.



DCG IS A NON-PROFIT ASSOCIATION

OUR GOAL IS TO SUPPORT THE UNDERSTANDING AMONG NATIONS BY FOSTERING AND ORGANIZING EDUCATIONAL PROJECTS

ESTABLISHED IN 1998

WE HELPED MORE THAN 3.500 PARTICIPANTS IN OUR PROGRAMS

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Contact for academic questions

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**STILL HAVE OTHER QUESTION?
PLEASE FEEL FREE TO CONTACT US!**

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