# SEM MASTER STRUCTURAL ENGINEERING

a cooperation of HTWK Leipzig University of Applied Sciences DCG Halle gGmbH – International Institute –





## STUDENT INFORMATION



#### study

HTWK Leipzig University of Applied Sciences ("HTWK Leipzig") offers innovative teaching and research at international level and with international study quality and quality of life in the heart of central Germany.

# WHY WOULD YOU JOIN A COOPERATIVE STUDY PROGRAMME WITH THE HTWK LEIPZIG UNIVERSITY OF APPLIED SCIENCES?

The HTWK Leipzig was established in 1992, building on its predecessors and continuing a long tradition of scholarship in Leipzig.
Today, with about 6.000 students, HTWK Leipzig ranks among Germany's largest universities of applied sciences.

HTWK Leipzig's trademark feature is practice oriented, career relevant education in short and intense courses of study. HTWK Leipzig's curricula have been designed to meet rapidly evolving industry needs, preparing students for high level professional practice in fields such as engineering, business, social science and cultural studies.

For more than two hundred years, the HTWK Leipzig and its predecessors have been providing high quality, career relevant education in a diverse range of fields through innovative courses, excellent teaching and state of the art facilities.

Based in the trade fair city of Leipzig, the HTWK Leipzig is committed to forging partnerships with industry and government to deliver practical results through focused research. With a campus located right in the heart of Leipzig's most popular student neighbuorhood, students at HTWK Leipzig may enjoy an ideal combination of outstanding academics and vibrant student life. The roots of the Faculty of Civil Engineering trace back to the 18th century and constitute the reputation of the HTWK Leipzig as a university with an outstanding academic education accompanied by an exceptional practical orientation.

#### The HTWK Leipzig has six faculties

**Architecture and Social Sciences** 

Business Administration and Industrial Engineering

Civil Engineering

Computer Science and Media

**Digital Transformation** 

Engineering



1 Opera House Leipzig 2 Nikolai Church Leipzig



## WHY WOULD YOU BE INTERESTED IN STUDYING A MASTER IN STRUCTURAL FURTHERING?

The international two-year degree course is offered to Civil Engineers pursuing a specialization in Structural Engineering.

Students at the Faculty of Civil Engineering may not only attend traditional style lectures, seminars or work placements, but also showcase their talents in a diverse range of student competitions. The faculty's teaching staff regularly includes many knowledgeable experts from the field in addition to their own distinguished professors. What is more, the faculty's collaborations with numerous regional companies enable students to start working on real world projects from day one of their studies.

All courses at the Faculty of Civil Engineering take place in lecture halls and seminar rooms equipped with cutting edge technology. The Laboratory Building, named after August Föppl (mechanic, engineer and university teacher), boasts a diverse array of laboratories with state-of-the-art equipment. High quality testing instruments are used not only in the materials, soil mechanics, and water engineering labs, but also in the experiment hall when courses are in session. Moreover, students work hands on with the latest computer technology and most current software.

#### Goals of Structural Engineering

Students will be equipped with the skills to think about and act upon the social consequences of their activities, to cooperate with expert colleagues and to work in teams.

They will learn to present the results of their work with conviction and to discuss their ideas with self-confidence.

They will develop creativity, decision making skills, assertiveness and flexibility to act socially responsible and environmentally conscious.

### What kind of career does the SEM programme prepare you for?

Structural Engineering is a practical oriented technical/academic discipline. The job outline is characterized by various fields of activity, e.g. in construction companies, building authorities and engineering offices as well as in research and teaching in the field of Civil Engineering.

The master program is supposed to develop widely educated graduates, who on the one hand can work in all areas of the building industry and on the other hand have state of the art specialist knowledge.

After their studies of Structural Engineering students shall be able to work independently, to analyse scientifically sound complex technical, mathematical and science problems, and to be able to understand and solve them. Students will get the knowledge and abilities to transfer their theoretical knowledge into practice.

Graduates of the Master Structural

Graduates of the Master Structural Engineering will be able to lead complex construction and planning projects and to take over leadership roles.

#### Benefits of studying at HTWK Leipzig

Individualized study environment, studying in small groups

Leipzig, the ultimate student town with international atmosphere

Highly practice oriented programs – research intensive

Active campus life, all facilities within easy reach

PhD degrees may be granted (in association with research universities)

State of the art facilities, new laboratories and studios



## WHO SHOULD APPLY TO THE MASTER STRUCTURAL ENGINEERING PROGRAMME AT HTWK LEIPZIG UNIVERSITY OF APPLIED SCIENCES?

#### What admission requirements do I need to fulfil?

- Academic bachelor's degree in Civil Engineering
- Letter of motivation
- Professional interview in English with representatives of HTWK Leipzig 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 Structural Engineering 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 SEM programme refers to the internet based TOEFL in general. However, there is a various number of adequate language tests. The following scores refer to 79 points TOEFL iBT:

- TOEFL, internet based 79
- IELTS, 5.5
- TOEIC, 615

#### **HOW IS THE PROGRAMME STRUCTURED?**

In close cooperation with renowned partner universities, the academic education is organised as follows:

#### 1st / 2nd semester

The first two semesters are taught at the cooperating institution in accordance with the curriculum of the HTWK Leipzig.

Thereby, the requirements for the recognition of equivalent course modules corresponding to the European Credit Transfer and the Accumulation System ECTS are met.

#### 3rd / 4th semester

The third and fourth semester are spent at the HTWK Leipzig. The courses are taught in English language exclusively. After the successful completion of the courses and the elaboration of the master thesis, the academic degree Master of Science (M.Sc.) is granted.

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

This depends on the capacity of the partner university and has to be defined individually.

Will HTWK Leipzig come to teach at the partner university?

This is not planned.

## The course content covers advanced

The course content covers advanced topics of Civil Engineering with the focus on Structural Engineering:

#### Structural Mechanics

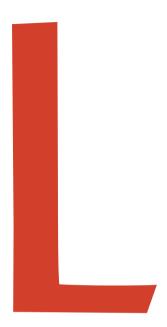
Mechanics of Materials Numerical Methods and Simulation Experimental Mechanics Structural Dynamics Finite Element Method Shell Structures

#### Structural Engineering

Reinforced Concrete
Prestressed Concrete
Steel Construction
Composite Structures
Precast Concrete Elements
Foundation Engineering
Spatial Concrete Structures
Bridge Design

#### **Building Materials / Applied Physics**

Reinforced Concrete
Prestressed Concrete
Steel Construction
Composite Structures
Precast Concrete Elements
Foundation Engineering
Spatial Concrete Structures
Bridge Design



#### live

A lively metropolis ranked first nationwide to have the most attractive inner city.

#### WHAT IS LIFE IN LEIPZIG LIKE?

Leipzig, as one of the major cities in Germany with more than 587.000 inhabitants, looks back to a very long history.

In 2015 the city has celebrated its 1.000th birthday. Also called the City of the Peaceful Revolution in 1989, it is also the hometown of Johann Sebastian Bach.
Other interesting places to visit are

the Gewandhaus Orchestra, the
Monument to the Battle of Nations, the
Old City Hall or the Auerbach's Cellar
that Goethe included in one of his
"Faust" scenes. Additionally, terms like
Little Paris, Thomanerchor, and Monday
Demonstrations are linked with Leipzig
and enhance its prestige worldwide.
As a university town for more than 600
years, Leipzig has always been home
to research and higher education, the

arts and media, as well as business and trade.

Leipzig is ranked first nationwide to consist of the most attractive cities in Germany. It is highly appreciated in ambience and flair, its retail sector and the availability of leisure activities. But also accessibility, opening hours, cleanliness and security play a vital role in its ranking.

Student life is very convenient using the various possibilities of transport. Leipzig has a large and wide-reaching tram network which covers 218km of roadway. In addition you can use 61 bus lines serving the city districts. But also bicycling is a very popular and the fastest mean of getting around. Students can also enjoy wonderful parks and lakes, restaurants and bars and the international flair of the city.

#### Close city highlights to visit

Leipzig is also centrally connected to the German railways and autobahn network with the highways A9, A14 and A38 and has its own airport, only 18 km outside the city center.

#### Interesting cities to visit

Berlin (190 km) Dresden (120 km) Prague (263 km) Hamburg (395 km) Frankfurt (396 km) Munich (430 km)

#### Events in Leipzig

Leipzig Book Fair (March)

Leipzig Marathon (April)

Honky Tonk Music Festival (May)

Museum Nights

City Festival (June)

Bach Festival (June)

Classic Open (August)

Christmas Market (December)



# 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 Leipzig.

#### **ADMINISTRATIVE INFORMATION**

#### What do I need to do to get my Visa?

The German partner of the cooperation, the DCG Halle gGmbH –International Institute–, is giving a big support in the whole Visa application process for the programme students.

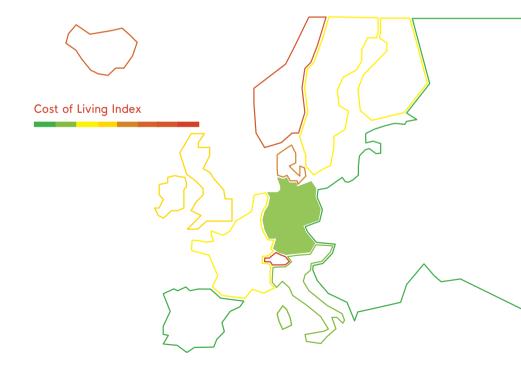
Chinese and Vietnamese programme students participate in the APS group processing and only need to go personally to the German Embassy for giving their fingerprints.

What students need to do is an interview

in English at the partner university with a representative from the HTWK Leipzig to prove their academic ability for the course. 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 gGmbH – 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 11.208 € (actually from 2022) 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 dormitory, 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 immigration 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 (65.58) and is placed on rank 7.

Related to the reunification of Germany in 1989, 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 programme students who study at the DCG partner university in Leipzig 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 2,40-4,00 € 0.5I of beer in a campus club costs 3 € 1kg of bread is available for 3,50 €

Studying a Master in English language in Germany is very cheap related to the fees and living costs in U.K or other West 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 tuition fee?

The Structural Engineering programme is a partner programme between the HTWK Leipzig and your university. HTWK Leipzig 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 programmes who got a study place to continue their study at HTWK Leipzig.

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".

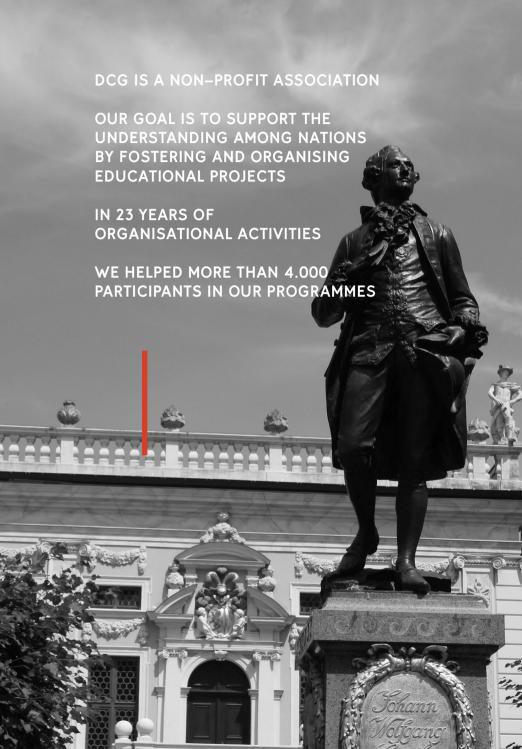
Students also have to apply for their Visa themselves and have to do their interviews for proof of English proficiency at the German Embassy in their county.

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 programme 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 programmes.

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 240 half days per year.





Dr. Oleg Krikotov oleg.krikotov@htwk-leipzig.de

#### **VISIT US!**

www. structural engineering. de



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

DCG Halle gGmbH - International Institute - www.dcg-halle.de

info@dcg-halle.de







#### report

The insights from our Alumni will give you an impression about study and life in Leipzig and at the HTWK Campus.

#### GAO YUSHUN (SEM GROUP 2013)

Now, I am a Structural Engineer and working for an architectural design company in Hangzhou. The biggest benefit from the SEM programme is that I got the master degree within 1 year and a half.

During my academic period, HTWK and ZJXU gave me lots of help. There are no difficulties with bureaucratic matters and authorities in general.

HTWK and ZJXU had already fixed the most issues. My local university (ZJXU) gave most of the necessary information about the preparation of visa, HTWK and so on. So preparation for abroad study is much easier then for others, who need to gather that information by themselves. And HTWK supports a very good local assistance for us. Here I must extend my most sincere gratitude to Mr. Omieczynski.



#### LI XINYANG (SEM GROUP 2011)

As a Chinese student, most procedures of application, such as visa, accommodation, health insurance, banking account were assisted and done by an agent in China and another agent in Germany. It was convenient. I suggest the local students who are preparing to go to Leipzig for study to follow their quidance.

Considering the technical study field, I think it was not so hard if paid enough attention and effort. The amounts of courses were appropriate so that I could spend the rest of my time in the library, in which I could find a lot of relevant books that the lecturers suggested, or stay in dorm to do some homework. The lecturers were kind and nice. They did all they could, sometimes like gestures or body language, to explain the technical points or help us to understand what they mean exactly.

The programme also included some practical experiments. I really loved this way of mechanical study, which we learned from seeing and doing. In general, I really enjoyed my academic life in Leipzig!

Now I work in an architecture institute as a Structural Engineer. My duty is using finite element software to set up the building models and designing all the structural members. The staffs of the SEM programme are very warm hearted and responsible. They did their best to help me with most of the bureaucratic matters. They went with us to the foreigner office to apply for the visa, translated canteen menu and helped in whatever problems I had in Leipzig.

Personally, the SEM programme benefited me not only in the study field, but I gained precious life experiences in Germany. The graduation of HTWK Leipzig is authenticated by Chinese government. Everyone thinks it is harder to get a German master degree than in English speaking countries.

My self-independence and confidence have been improved during communicating with Germans and people from many other countries. The one and a half year life in Germany through the SEM programme was really impressive and fantastic in my life. And it will be always remembered in my mind. How I wish I could be a student and study in Germany again!

## ALEKSANDRA SAVENKOVA (SEM GROUP 2014)

Due to good organizations, the bureaucratic issues were not disturbing during my stay in Leipzig. The most important part has been the application for visa. I would like to mark the great support with this procedure. All documents have been prepared on time and did not cause any complaints during submission at the Embassy.

I have received the information about Leipzig and SEM programme, so to say, first hand. Professor Holschemacher has paid my native town and university a visit. We have got a better idea about the programme itself and have had an opportunity to ask the questions of interest.

The assistance during our first days in Leipzig has been also at a high level, starting with picking us up at the railway station and ending with the tour over the HTWK. We were provided with SIM-cards, transport scheme, studying schedule and accommodation at a student house, all of which was satisfying. I really appreciate the level of support in every aspect during our study. The programme itself was well structured. The quality of lectures was even above my expectations. The classes were technically equipped, which helped to accelerate the studying process and save time. Moreover, I found the scripts provision very useful.

I was surprised by the number of experiments and trainings with some equipment. We gained a valuable practical experience, which was very engaging. The attitude of professors for me was perfect, always correct and helpful. I also appreciated the opportunities and assistance in conducting the experiments during my master theses. The social life in HTWK is also exciting. The competitions are very beneficial for the students, in my opinion. They help to keep up the interest in studying, adding a little bit of challenge, and encourage expanding of the social circle.

Today, I am a Project Controller at THOST Projectmanagement, Russia. It is a German company with an office in Moscow. They mostly work in a field of Project Management in construction industry. Today I have a project in Kazakhstan concerning the metal-lurgical area.

I feel certain of the fact that the German degree has played a significant role in obtaining of this job. I am the first female specialist in our Moscow office with the technical master degree and sufficient level of foreign language knowledge.

I feel up to continue the development of my career in the field of Project Management and besides this professional area becomes more and more popular in Russia today.

#### ZHAO XURAN (SEM GROUP 2015)

The non-academic services were really good. First, I think the living conditions were very good and convenient. The apartments are not very far from school and you can easily go anywhere by tram, bus or train. Second, we can easily buy some food in LIDL or REWE. Although they are a little more expensive than in China, they are still much more cheaper than in other big cities in Europe. Third, I got a lot of help from native people.

One time, when my student card was broken, one staff from school, who did not speak English, helped me to refresh my card. He took me to the mensa and did it step by step. I really thanked him.

I have a really happy study life in HTWK. All the teachers are nice and patient. They have tried their best to give us classes. Especially Prof. Slowik and Prof. Holschemacher. I learned a lot from them. Then I did my thesis with the help of Philipp Löber and Björn Heiden. They also gave me a lot of help.

I have learned a lot during my study. It made a big influence in my life. And our daily study and life are all in the charge of Mr. Omieczynski. All the things we did not know, we were able to ask for his help. I will never forget the first day when we arrived at Leipzig, Mr. Omieczynski picked us at airport and treated us Asian food.

## ZHENG ZHIQIAN (SEM GROUP 2014)

Leipzig is a very beautiful city. It is not a very big city but is a well equipped city. The traffic transportation is very conveninent here. There are always many activies happening here. My time in Leipzig will be unforgettable to me. Every student has an own bedroom, which just belongs to himself. The DCG also provides health insurance to every one of us. Every month, we get two hundred Euro or more from the bank as pocket money.

The quality of lectures and trainings is very good in the SEM programme. We had some professional courses to be finished. Besides, we also needed to complete some tests in the form of a group. The teachers in HTWK are all very nice and patient.



## HTWK

Leipzig University of Applied Sciences





