STUDYING IN DRESDEN

Special Services

Advice in administrative matters offered through a service run by tutors and professors.
Overseas placement assistance.
Complementary lectures in German are offered.
German language courses are offered by various organisations, for example TUDIAS or Goethe-Institut, Dresden.
Housing Services: The Studentenwerk Dresden offers various options for accommodation in Dresden. Costs range from 130 to 240 EUR per month.
http://www.studentenwerk-dresden.de/english/

Further Research Work

Research work leading to a Ph.D. degree may be offered to top level M.Sc. graduates.

Fees

The enrolment fee is currently about 240 EUR per semester and includes a "Semesterticket" which entitles students to use the public transport system in Dresden and regional trains throughout the federal state of Saxony.

Grants

Different options for receiving financial support are available.
For further information please check http://tu-dresden.de/internationales, or go to the website of the DAAD www.daad.de.
Please bear in mind that there might be possibilities of funding in your home country.

CITY OF DRESDEN

The City of Dresden, with about half a million inhabitants, is the capital of Saxony. Dresden is located on the Elbe River and renowned for its opera, concert halls, theatres, museums, and art galleries. Students can also enjoy the great variety of pubs and cafés. Dresden is surrounded by large forests and hilly terrain offering a plethora of opportunities for hiking, biking, mountain climbing, swimming and skiing.

April/2014

Contact details of the faculty

Technische Universität Dresden
Fakultät Bauingenieurwesen
01062 Dresden
Tel: +49 351 463-32336

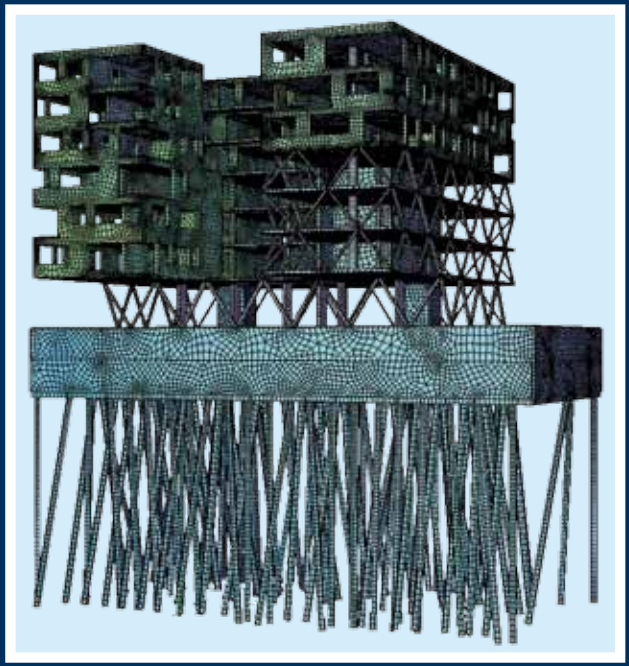
Internet: www.tu-dresden.de/biw/access
Email: access@mailbox.tu-dresden.de

TECHNISCHE UNIVERSITÄT DRESDEN

Faculty of Civil Engineering

ACCESS

ADVANCED COMPUTATIONAL AND CIVIL ENGINEERING STRUCTURAL STUDIES



An International Two-Year Full-Time Study Programme in English

THE COURSE

Advanced Computational and Civil Engineering Structural Studies (ACCESS)

ACCESS seeks to facilitate the development of a strong knowledge base in the field of computational mechanics and structural analysis, working collaboratively with advanced civil engineering design.

Technical innovations for challenging engineering tasks rely heavily on numerical simulation tools. Therefore, the goal of this programme is to provide the skills for understanding, modelling and analysis of these approaches in the broader context of application and design by focusing on:

- ❑ state-of-the-art computational mechanics
- ❑ current numerical structural analysis
- ❑ research in structural modelling and analysis
- ❑ current developments in civil engineering design
- ❑ advanced construction methods

Engineers with a strong computational background are in high demand in international companies, consultant agencies, engineering offices, construction enterprises and research.

Admission Requirements

- ❑ Above-average university degree in engineering
- ❑ IELTS: Level 6.0 or TOEFL: 79 points internet-based
- ❑ Good knowledge in mathematics and mechanics

Master's Programme starting date

Winter term, October 1

Deadline for Application

- ❑ May 31

CURRICULUM

Semester 1 – 30 Credit Points

- Module BIWO-01 **Building Materials** 8 cr
- Module BIWO-02 **Continuum Mechanics, Tensor Calculus** 8 cr
- Module BIWO-03 **Energy Methods, FEM** 8 cr
- Module BIWO-04 **Numerical Methods** 4 cr
- Module BIWO-05 **Mentoring Study Competence** 2 cr

Semester 2 – 30 Credit Points

- Module BIWE-01 **Design of Concrete Structures** 4 cr
- Module BIWE-02 **Design of Masonry Structures** 4 cr
- Module BIWE-03 **Timber and Lightweight Structures** 4 cr
- Module BIWE-04 **Advanced Geotechnical Analysis** 4 cr
- Module BIWE-05 **Structural Use of Glass** 4 cr
- Module BIWE-06 **Comput. Methods for Reinforced Concrete Structures** 4 cr
- Module BIWE-07 **Computational Building Physics** 4 cr
- Module BIWE-08 **Multiscale Mechanics** 4 cr
- Module BIWE-09 **Computational Dynamics** 4 cr
- Module BIWE-10 **Modelling and Simulation in Pavement Engineering** 4 cr
- Module BIWE-11 **Cable-Stayed Bridges** 4 cr
- Module BIWE-12 **Safety Concepts** 4 cr
- Module BIWE-13 **BIM-Based Virtual Engineering Lab** 4 cr

select **28 (7 x 4) cr**

Semester 3 – 30 Credit Points

- Module BIWO-06 **Mentoring Methodological Competence** 2 cr
- Module BIWO-07 **Application of Computational Methods in Engineering** 6 cr
- Module BIWO-08 **Project Work** 24 cr

Semester 4 – 30 Credit Points

- **Master's Thesis and Colloquium** 30 cr

mandatory

select 7 from BIWE-01 – BIWE-13

mandatory

Master of Science