



The network of the leading Institutes of Technology in Germany

RWTH Aachen

Technische Universität  
Berlin

Technische Universität  
Braunschweig

Technische Universität  
Darmstadt

Technische Universität  
Dresden

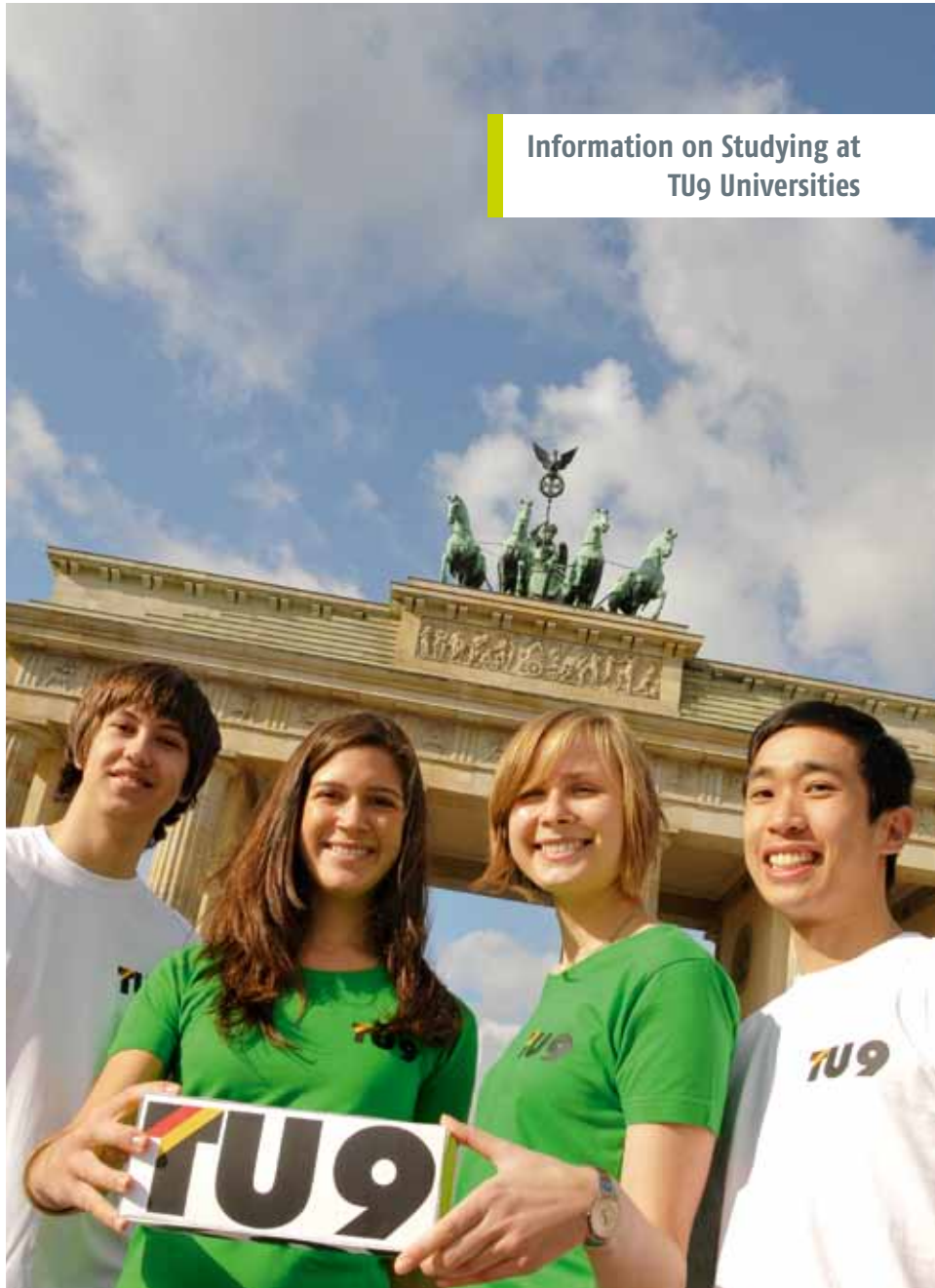
Leibniz Universität  
Hannover

Karlsruhe Institute  
of Technology

Technische Universität  
München

Universität Stuttgart

Information on Studying at  
TU9 Universities



EXCELLENCE IN ENGINEERING  
AND THE NATURAL SCIENCES  
MADE IN GERMANY



**"TU9** is the network of Germany's leading  
**Institutes of Technology"**

## Index

- 4 TU9 Key Features
- 6 TU9 Institutes of Technology  
in Germany
- 8 Choosing a programme

RWTH Aachen University	10
TU Berlin	12
TU Braunschweig	14
TU Darmstadt	16
TU Dresden	18
Leibniz Universität Hannover	20
Karlsruhe Institute of Technology	22
TU München	24
Universität Stuttgart	26



- 28 Applications and Admissions
- 29 More women at TU9
- 30 Degrees
- 32 Money Matters and Careers
- 34 TU9 network for Alumni  
of German Schools Abroad
- 35 Contact



TU9 is the network of Germany's leading Institutes of Technology



The members of TU9 are: RWTH Aachen University, TU Berlin, TU Braunschweig, TU Darmstadt, TU Dresden, Leibniz Universität Hannover, Karlsruhe Institute of Technology (KIT), TU München and Universität Stuttgart.

## The TU9 Institutes of Technology

### Key Features:

#### Universities with Tradition

All of the TU9 Institutes of Technology can look back on a long tradition and enjoy an excellent reputation both in Germany and internationally. They were founded in the age of industrialisation and have shaped the development of engineering science ever since. Their scientific potential and their range of studies have grown continually over a period of almost 200 years.



#### Interdisciplinary Nature

Cooperation between different disciplines gives rise to innovation. Scientific learning means crossing subject boundaries. Creativity requires an interdisciplinary orientation. Students are expected to study subjects beyond their main discipline. An interdisciplinary nature is reflected in such combined degrees as industrial engineering, media studies and computer science, or biotechnology.

#### A Wide Range of Courses

While the main emphasis lies in engineering and natural sciences, the TU9 Institutes of Technology also offer courses in economics, humanities and social sciences. These not only complement the training of engineers but can also be studied as independent subjects.

#### International Nature

As research universities, the members of the TU9 association have always been highly international. Close strategic cooperation with partner universities worldwide makes an intensive exchange of experts and research possible.

With the internationalisation of teaching over the last 20 years, opportunities to study abroad and courses for international students have been systematically set up. Dual degree courses mean that, in addition to a degree from their home university, students can obtain a degree from a leading foreign university. The introduction of bachelor's and master's degrees has created excellent conditions for those wishing to transfer to a university beyond national boundaries.

The ECTS (European Credit Transfer System) enables credit points gained at foreign universities to be recognised at the home institution.

The proportion of international students at TU9 Institutes of Technology is above the average for Germany.



#### Practice Orientation

Practice-oriented research and teaching are reflected in TU9's excellent contacts to large and medium-sized businesses. International and national businesses invest in research and teaching, e. g. in foundation professorships or in the sponsoring of dissertations.

Research partnerships and technology transfer enable students to gain practical experience in industry during their studies and to make contacts for their later careers. The TU9 universities thus create excellent conditions for embarking on a career after graduation.



The network of the leading Institutes of Technology in Germany



**RWTH Aachen**

Active on all continents!  
Want to study science and engineering?  
Exzellenz RWTH Aachen University!

**TU Berlin**

Looking to the future:  
TU Berlin is the driving force behind innovations and  
trains creative minds for new ideas.

**TU Braunschweig**

TU Braunschweig – Studying in Europe’s most active  
research region.

**TU Darmstadt**

Qualifications gained at Technische Universität  
Darmstadt, Germany’s first autonomous university,  
lead to excellent career opportunities.

**TU Dresden**

Practical teaching, designing the future – excellent  
practice-oriented training at TU Dresden.

**Leibniz Universität Hannover**

Shaping the future with knowledge.

**Karlsruhe Institute of Technology (KIT)**

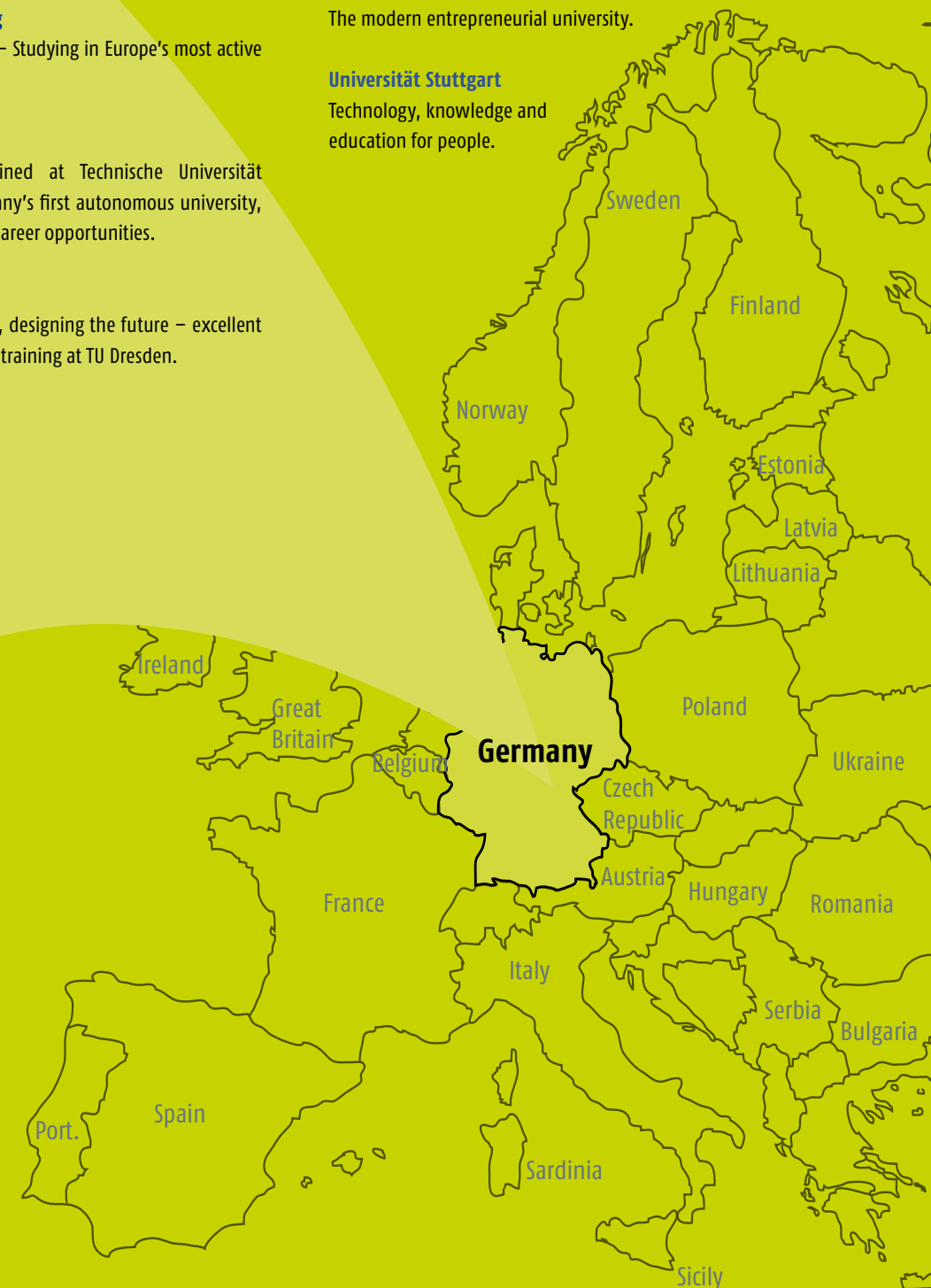
KIT – University of the State of Baden-Württemberg  
and National Laboratory of the Helmholtz Associa-  
tion.

**TU München**

At home in Bavaria, successful in the world.  
The modern entrepreneurial university.

**Universität Stuttgart**

Technology, knowledge and  
education for people.



# CHOOSING A PROGRAMME

## Which is the right subject for you?

*It is important to choose a subject according to your interests and above all your strengths.*

Recognise your strengths and weaknesses e.g. by taking TU9's aptitude test. Different modules designed to meet the demands of the respective courses focus on such topics as mathematics and logic, interests and motivation.



You will receive an aptitude assessment and detailed feedback on your results. Start the test at [www.self-assessment.tu9.de](http://www.self-assessment.tu9.de)

## Narrow down the number of possible subjects.

### What are you going to study?

First information on courses and subjects can be found at [www.studienwahl.de](http://www.studienwahl.de) or [www.hochschulkompass.de](http://www.hochschulkompass.de).

Information on everyday life at German universities for international students is available at [www.tu9.de/studium](http://www.tu9.de/studium).

Tip:

**Ask the careers and study advisor at your school and former pupils studying at TU9 universities for advice.**

The TU9 Institutes of Technology offer a wide range of courses in engineering and the natural sciences as well as an excellent all-round education.

This will provide you with the best career prospects after graduation. Job placements, especially for engineers, are varied. You can work in development, production, service and sales or also in the higher management of a company. Many graduates become self-employed, starting their own business.

For further information on careers in engineering visit [www.think-ing.de](http://www.think-ing.de)

## Mathematics, Natural Sciences, or Engineering? Which degree courses are there? What are you going to study?

In **engineering**, knowledge from the natural sciences is put into practice, usually to develop and construct industrially used and created products. Basic subjects for engineering are mathematics and physics; in some areas, chemistry and biology are also of major importance. Especially at the beginning, these subjects represent a fundamental part of an engineering course.

The classical engineering disciplines are **Civil Engineering, Mechanical Engineering, and Electrical Engineering.**

The **natural sciences** are the foundation for engineering. They explore organic and inorganic nature. The classical subjects in the natural sciences are physics, chemistry and biology. Today, other fields such as astronomy, geology or anthropology are also regarded as natural science subjects.

The goal of the natural sciences is to test broad hypotheses through systematically conducted experiments. In doing so, knowledge is gained that can be applied in practice-oriented fields such as medicine, agriculture or industry.

**Mathematics** calculates and experiments with models. It involves applied research as well as fundamental research. For the natural sciences, engineering, economics, and even in the humanities, mathematics forms an important basis.

**Computer science** was born of mathematics. It deals with the systematic processing of information with the help of modern computer technology.

In practice, there are no clear dividing lines between the individual disciplines. Because of this, many courses are interdisciplinary. The subject of mechatronics, for example, builds on the foundations of electrical engineering, mechanical engineering and computer science. Industrial engineering and business computing combine engineering and technical knowledge with business content. Trained biotechnologists are expected to have a knowledge of the natural sciences (biology, biochemistry) and of engineering as well as to pay attention to economic aspects.



## RWTH Aachen University The Future Starts with Us!

The Rheinisch-Westfälische Technische Hochschule Aachen, known as RWTH Aachen for short, has been in existence since 1870. Some 30,000 students are enrolled in more than 85 Bachelor's and Master's degree courses. The main emphasis is on the engineering sciences.

Roughly 40 percent of our students study engineering, with an additional 25 percent enrolled in natural sciences, mathematics or computer science. Humanities, social sciences, business, economics, and medicine are also available to students. New, forward-looking interdisciplinary courses such as industrial engineering, biotechnology, materials science informatics and computational engineering science have been introduced.

RWTH Aachen belongs to the esteemed group of Germany's nine most elite universities. In addition, the university was recognized as the winner of the Excellent Teaching competition in 2009.

Cooperation between individual faculties is reflected in 13 collaborative research centres. Research projects starting at the Bachelor's degree level are open to students to enable them to gain valuable experience at an early stage in their university studies. Some 2,000 Bachelor's and Master's students successfully complete their degree every year, and approximately 700 graduate students are awarded doctorates.



*A place of work and study for scientists and executives from all over the world.*

China, Turkey, India, among **130 additional countries**, are home to our 18 percent international students at **RWTH Aachen**. The International Office is responsible for the continued globalization at RWTH Aachen, and the support of all international students.

Student associations, such as INCAS (Intercultural Centre for Aachen Students) and country-specific clubs, assist the International Office in their support of international students. These associations help integrate the new students into university life. The BeBuddy program assigns each international student to an experienced RWTH student mentor. The Humboldt-Haus functions as the university's international meeting point where students can meet friends from all over the world.

Every year more than 600 students take part in RWTH Aachen's exchange programmes with leading international universities. The RWTH has over 500 established exchange partnerships with universities across the globe. For example, students have the opportunity within the framework of the IDEA League, to participate in research programmes with the ETH Zürich, TU Delft, Paris Tech, and Imperial College. Dual-degree programmes, such as the Master's degree programme with Tsinghua University in China, emphasize the RWTH Aachen's link to strategically important partners.

## Living in Aachen

The main campus of RWTH Aachen is spread over three sites: northwest of the city centre, inside of the city centre, and outside of the city centre. The cost of living for students is approximately € 750 per month. A room in a residence hall costs between € 150 and € 300 per month. The University Sports Centre offers activities, including international sports camps, in 80 different types of sports. Sports competitions are held with our IDEA League partner universities, and university sports play an essential role in RWTH Aachen's intercultural activities. Student choirs and orchestras, theatre and music groups, cinema and cabaret, as well as numerous social and political initiatives breathe life into the university and the city.

With its 250,000 inhabitants, Aachen is a "small city" with a long tradition and history. It is the westernmost city in Germany, located in the state of North Rhine-Westphalia where the three countries of Belgium, the Netherlands and Germany meet. Thanks to good train connections, top tourist destinations, such as Brussels and Paris, are easily reached. The volcanic mountain range of the Eifel, as well as the Ardennes hills and forests between the Mosel and the Maas are popular local holiday spots.



More than 40,000 students enrolled at Aachen's universities and colleges make for a vibrant atmosphere in the city. The historical cityscape is made up of winding lanes, the famous Aachen Cathedral and generous pedestrian areas. Special mention must be made of the many fountains – and of course the numerous pubs.



### TU Berlin – The Institute of Technology in the Capital of Germany.

*The world is shaped by technological advances, from new means of communication to better transportation. TU Berlin is committed to preparing its students for our future world. Passing on knowledge goes hand in hand with analysing and finding solutions to socially relevant problems.*



Photo: TU Berlin/Elke Weiß

While TU Berlin's core research and teaching lies in engineering and natural sciences, courses are also offered in planning, social sciences, humanities and economics. Researchers collaborate across the disciplines to find solutions in the fields of energy, shaping human living spaces, health and nutrition, information and communication, mobility and transport, water and knowledge management. The broad range of subjects has been a key feature of the university since it was re-established in April 1946. The origins of the TU Berlin can be traced back to the 18th century, when the oldest of the predecessor institutions were founded, e. g. the Building Academy.

**Teaching and research today is carried out in close cooperation with independent research institutions and industry.**

A number of TU professors are at the same time in charge of an independent research institution. Well-known companies are committed to the TU Berlin: e. g. Deutsche Telekom AG with the Deutsche Telekom Laboratories and Siemens AG with the Centre for Knowledge Interchange. A practical orientation can be seen in the numerous business start ups that have grown out of the university. Students profit from the allocation of dissertations and work placements. With some 27,000 students in more than 90 courses of study, TU Berlin is one of the largest Institutes of Technology in Germany.



Photo: TU Berlin/Sabine Böck

**We have scientific cooperation agreements with some 100 universities worldwide. Some 1,000 students take part in exchange programmes with more than 300 partner-universities in Europe and overseas.**

TU Berlin offers 26 dual degree programmes together with foreign partner universities. Currently we have about 6,000 international students, mainly from China, Turkey, Poland, Bulgaria, Russia, Cameroon and Indonesia. Over 22,000 graduates are active members of the university's national and international alumni programmes.

The support team for international students offers individual advice: on topics concerning university studies, or questions about residence permits and social issues. In addition, it organises excursions, company visits and cultural events. Introductory sessions for new students and special courses help international students to find their way in the regular courses.



Photo: The Production Technology Centre (PTZ) is a joint institution of TU Berlin and Fraunhofer

[www.tu-berlin.de](http://www.tu-berlin.de)

### Living in Berlin

TU Berlin's central campus lies in the heart of West Berlin, near the Kurfürstendamm. Numerous clubs and interest groups as well as music and theatre groups provide an opportunity to join in university life. The University Sports Centre offers activities from aikido to yoga.

The TU's central location means easy access to the many leisure activities that Germany's largest city with its 3 million inhabitants has to offer. These range from numerous theatres and museums, three opera houses and the largest concentration of jazz clubs in Europe, to more than 6,000 pubs and restaurants.



40 per cent of the city is made up of woods, parks and lakes. In many competitive sports the capital is in the top league. Numerous political institutions, German and international associations, businesses and media centres have their headquarters here.

Living costs of about € 780 per month, including roughly € 270 for rent, are to be reckoned with. Some 10,500 places are available in halls of residence for the 132,000 students at Berlin's universities and colleges. It is, however, not especially difficult to find somewhere to live. The private housing market offers a wide choice of accommodation.



**THE CITY PULSATES WITH LIFE: COLOURFUL, CREATIVE AND FAST-MOVING.**



### TU Braunschweig – Studying in the most intensive research region in Europe.

*The history of the Technische Universität Carolo-Wilhemina zu Braunschweig begins in 1745 with the foundation of the Collegium Carolinum. The TU lies in the centre of Braunschweig, the "city of research" rich in tradition.*

Nowadays TU Braunschweig provides its 13,000 students with outstanding conditions for future-oriented research and teaching in 110 institutes and departments grouped together in six faculties. The academic core disciplines of engineering and natural sciences are closely meshed with business and social sciences, humanities and education. Roughly one third of our students are enrolled in interdisciplinary courses, such as business informatics, industrial engineering, financial and business mathematics, mobility and transport, biotechnology and geoecology.

**Braunschweig is "the most intensive research region in Europe".** With its large number of internationally famous research institutions and businesses, the Braunschweig region has the largest concentration of research and development activities in the whole of Europe. According to a study by the EU statistical office Eurostat, no other European region has such a high density of people working in research and development. Students benefit from the proximity of the famous external research institutions in the region and from a wide range of cooperation agreements with industry. They take advantage of the opportunities offered here to participate in current research projects through seminar papers, dissertations, and doctoral theses.



## BRAUNSCHWEIG – HIGH TECHNOLOGY IN THE HEART OF EUROPE

TU Braunschweig is a university with an international image. The most important partner countries are the USA, Brazil and China, as well as countries in Western and Eastern Europe. Within the framework of the EU mobility programmes, the TU maintains contacts to some 200 universities in Europe.

In the global economy, the additional qualification of "international experience" is a must for many students. A third of our students spend part of their studies abroad. Dual degrees with US American, French, Spanish and Brazilian universities open the international career market to graduates. 1,600 international students from more than 100 countries are currently studying at TU Braunschweig as regular students or as participants in international exchange programmes. Excellent support from the International Office and the mentoring programme of the International Student Network help international students to take their first steps here. An expression of international cooperation is found in the large number of visiting scientists working and teaching at TU Braunschweig.

### Living in Braunschweig

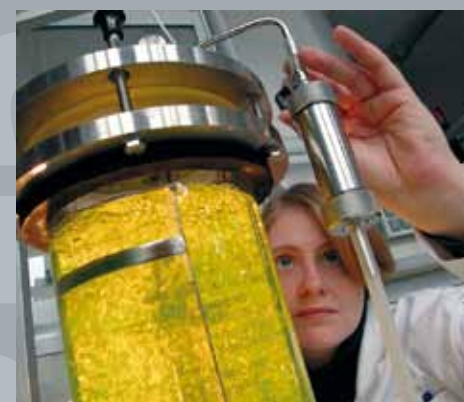
With a population of 240,000 Braunschweig is the largest city in the southeast of Lower Saxony and the cultural and economic centre of the region.

The city of Henry the Lion impresses visitors with its lively and pulsating city centre. Here the medieval and historical past meets the twenty-first century. Braunschweig offers all the advantages of a city. At the same time distances are short, with the TU facilities and the city centre easy to reach by bicycle.



A walk through Braunschweig is multifaceted. Castle Square, the Old City Market, and the Magni Quarter with their many cafés create a special atmosphere in the historic centre. In the varied cultural programme, new experimental art meets the classics. Culture devotees can enjoy the many museums, the State Theatre or independent theatre with plays and ballet. State-of-the-art exhibitions and exciting events are guaranteed by the Braunschweig University of Arts and the TU Braunschweig itself.

## BRAUNSCHWEIG – FROM THE MIDDLE AGES TO THE TWENTY-FIRST CENTURY



Winding right through Braunschweig, the River Oker is ideal for a canoeing trip or a picnic in the open air, especially in summer. Or you can raft directly to the beach club "Okerkabana" – a mini break on the beach, right in the heart of the city. Winter sports and trekking enthusiasts can be in the Harz Mountains within 40 minutes. The cost of living in Braunschweig is very reasonable compared to the rest of Germany. Students should reckon with costs of about € 580 per month. A room in a hall of residence costs € 180, while a room in a shared flat can be found for € 200 upwards.



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

### Technische Universität Darmstadt – University Studies under Ideal Conditions

Albert Einstein in his day was happy to recommend Technische Universität Darmstadt: "In my opinion you absolutely must go to Darmstadt. There is a good polytechnic there..."

Today, more than 130 years after the founding of the University, generations of well-known scientists and the leaders of major global companies recall with pride how their time at TU Darmstadt laid the foundations for their careers.



### Those who enrol at TU Darmstadt can depend on a guarantee:

TU Darmstadt is the only university in Germany that has undertaken the obligation, set down in state law, to provide all its students with intensive counselling and all the necessary conditions to permit high-quality education without delays, from enrolment to graduation. One of Germany's highest-ranked universities in both teaching and research, TU Darmstadt aims to qualify prospective students for the best possible opportunities in life.

The University's emphasis is on technology, and its approach has always been a universal one: engineering, the natural sciences, the social sciences and the humanities work closely together, reaching across the boundaries between the various disciplines. Scientists and their students at TU Darmstadt work on the technologies of the future with practical applications. And the business world finds that appealing: International corporations such as Rolls Royce, Deutsche Bahn, Merck, Wella, Henkel, Lufthansa and SAP, and growing regional companies like Carl Schenck AG, are just some of the selected partners whose doors are open to TU students.

The courses of study have been restructured to lead to Bachelor's and Master's degrees that are recognized worldwide.

Transfer students' degrees from TU Darmstadt are recognized unreservedly throughout Germany and abroad. TU Darmstadt is known for the integration of research in its teaching: students and scientists learn and research together. This philosophy has long been one of the secrets of TU Darmstadt's success.

**Since its founding in 1877, TU Darmstadt has been an internationally oriented university. International students make up over 20 percent of its student body of about 21,000, well above the average for German universities.**

At the same time, the University strives to enable every student to study at one of its renowned partner universities abroad. TU Darmstadt cooperates with over 100 universities all over the world, including such respected institutions as Virginia Tech, UC Berkeley, Imperial College London, Tongji University, École Centrale de Paris and Chalmers University, Göteborg.

### Advantages of Darmstadt, City of Science

The TU is at the centre of Darmstadt, the City of Science, with its population of 140,000. The University is a major contributor to the welfare and growth of the Rhine–Main–Neckar region, one of the best-developed metropolitan areas in Europe. Excellent non-university research facilities in and around Darmstadt have collaborated closely with TU Darmstadt for years. The directors of the city's three Fraunhofer Institutes are professors at TU Darmstadt. The University also has excellent relations with ESOC, the satellite control centre of ESA, the European Space Agency, with EUMETSAT, and with the heavy-ion research centre GSI. Art is also alive in Darmstadt: The Jugendstil artists' colony at Mathildenhöhe attracts thousands of art lovers every year.

[www.tu-darmstadt.de](http://www.tu-darmstadt.de)

### Living in Darmstadt

The University is surrounded by stimulating opportunities for students to pursue personal interests in their leisure time. For dancing and partying, there is "603qm", a trendy club right on campus. In their free time students practice their golf swing on TU Darmstadt's own driving range, design and build pioneering solar cars, or take to the air from the University's own airfield with the Academic Aviators. TU Darmstadt creates space for creativity and enthusiasm even outside the required course schedule.

As the hub of Darmstadt, City of Science, with its population of almost 140,000, Technische Universität Darmstadt contributes to the prosperity and progress of one of the most influential metropolitan regions in Europe, the Rhine–Main–Neckar region.



**DARMSTADT: CITY OF SCIENCE**

### TU Dresden – Knowledge Builds Bridges

*Building bridges between science and industry, between different scientific disciplines as well as between university, society and political life is a central concern of TU Dresden.*

Technische Universität Dresden dates back to the "Technische Bildungsanstalt Dresden", founded in 1828. TU Dresden thus ranks among the oldest technical-academic educational establishments in Germany. In the meantime it is also one of the strongest in research. With some more than 35,000 students, it is now the largest university in Saxony. Committed to the natural sciences and engineering before the reunification of Germany, it has since developed into a full university through the foundation of additional new faculties in humanities, social sciences and medicine.

**With a total of 14 faculties, TU Dresden is one of the universities offering the greatest range of courses in Germany.**

The broad spectrum of courses of study includes innovative interdisciplinary opportunities, e.g., programmes in mechatronics combining and integrating Computer Science, Mechanical and Electrical Engineering or Waste Management and Contaminated Site Treatment at the Department of Hydro Sciences.

Core research at TU Dresden concentrates on the following interdisciplinary topics: regenerative medicine and molecular bioengineering, materials science, biomaterials and nanotechnology, computer and communication systems engineering, population, infrastructure and transport, water, energy and environment, as well as social change, culture and education.



Photo: TU Dresden



The Beyer Building is TU Dresden's landmark

**TU Dresden is proud to be international. We have more than 120 partner universities worldwide.**

Spending a semester at a Japanese, French or Russian university is nothing unusual for TU Dresden's students. The proportion of international students here is more than 10 per cent. In the years following German reunification, TU Dresden has greatly extended its international cooperation agreements and established new contacts especially in Western Europe and North and South America. At the same time already existing close ties to Central and Eastern Europe were strengthened. We also have excellent contacts to East Asia, which can be seen in the high numbers of East Asian students. These make up some 20 per cent of all non-German students, followed by students from certain Central and Eastern European countries (Poland, Bulgaria and Russia together about 10 per cent). After the end of the GDR, an increasing number of young people from Western Europe began to be interested in studying in Dresden – the largest groups being French and Spanish.

In addition to the International Office, several student groups help to look after foreign students. One example is the "LinkPartnerProgramm", which sets up contacts between foreign and German students. The Erasmus Initiative of TU Dresden organises a weekly get-together, where students from all over the world can meet each other, as well as numerous cultural events such as walking tours of the city, excursions, brewery tours or rafting on the Elbe.

Student Services in Dresden offers international students a service package. For a reasonable all-in price they can book a room in a hall of residence, bedding and crockery etc.

### Living in Dresden

From a cultural and historical point of view, Dresden is an ideal city to study in. It is the capital of the Free State of Saxony, and has about 500,000 inhabitants. Over 40,000 students enjoy student life and the advantages of a modern city. World famous as Florence on the Elbe, it has unique architecture and culture to offer, with the Semper Opera, the Zwinger and the reconstructed Frauenkirche church.

Tradition and the twenty-first century live side by side in Dresden. The State Art Collections with the famous Raphael painting "the Sixtine Madonna", the Semper Opera, and the State Theatre are all part of a long tradition. A lively modern art scene is represented by small experimental theatres, arts cinemas and a wealth of contemporary art galleries. The Centre for Contemporary Music, the Beatpol as East Germany's famous avant-garde rock club, and the jazz club "Neue Tonne" are all to be found in Dresden. A special mention should be made of the fact that the Saxonian capital is considered to have the highest number of student clubs in Germany. From simple, cosy meeting places to romantic vaulted cellars for concerts, theatre and films, there is something for everyone. And if you want an evening out: more than 200 pubs of all shapes and sizes are concentrated in Dresden-Neustadt, the trendy part of the city.



**DRESDEN AND SURROUNDINGS ARE A GOOD PLACE TO STUDY AND RELAX IN.**



Photo: TU Dresden

TU Dresden's campus stretches over a wide area to the south of the city centre and is well served by public transport. There are 35 halls of residence, half of which have been recently renovated. A single room costs between € 150 and € 250 per month, depending on the facilities. Those wishing to share a flat have to reckon with costs from € 150 per month and room. It is no problem to find a place in a hall of residence or on the open housing market. For living costs, which are incidentally among the lowest in the whole of Germany, one should plan a total of at least € 550 per month.

As well as sports such as football, swimming or tennis, the University Sports Centre offers climbing courses, either indoors or in the nearby Elbsandstein Mountains, also known as "Saxon Switzerland". It takes less than half an hour to get there. The Ore Mountains with their opportunities for winter sports are just as close.

The world famous cities of Berlin and Prague are each a two-hour train ride away.

According to manager-magazin (12/05), Dresden offers the best quality of life in the whole of Europe. An advantage that students should not miss.

### Leibniz Universität Hannover – Shaping the Future with Knowledge

Founded in 1831 by scholar Karl Karmarsch, the “Higher Trade School of Hannover” started with only 64 students. Today this number has grown to more than 20,000.

Students are attracted to Leibniz Universität Hannover by the broad variety of courses, with more than 70 subjects in over 170 full-time and part-time programmes of study in natural sciences and engineering, humanities and social sciences, as well as in economics and management and law. Traditionally, the strength of the university lies in the outstanding training in the engineering and natural sciences.

A wide spectrum of research partnerships is indicative of practice-oriented research and teaching. An example of this can be seen at the Production Technology Centre (PZH), a research complex unique in Europe. Here research into and development of complex production technology is carried out on a 22,000 sqm site by six institutes from the Faculty of Mechanical Engineering and their industrial partners. Students work directly with production industry. In close cooperation with Hannover Laser Centre e.V. and the university's Institute of Gravitation Physics, the Max Planck Society has built up an international centre for gravitational wave astronomy.

L3S, the research centre for innovative learning technology, is situated near the Welfenschloss (royal palace). Together with international partners e.g. Stanford University, USA, a virtual campus has been created for e-learning in all subjects.



Photo: Leibniz Universität Hannover

International contacts are part of everyday life at Leibniz Universität Hannover. Institutes, departments and subject areas have more than 2,000 cooperation agreements with partners in 95 countries on all continents. Apart from traditional partnerships in the USA or Europe, those with Asian countries and the Russian Federation are playing an increasingly important role. These partnerships may for example take the form of exchanges for students and academic staff, joint research projects or summer schools. The fact that 12 percent of our students come from abroad is living proof of the international attractiveness of Leibniz Universität Hannover.

**International courses like the master's degree “Water Resources and Environmental Management” (WATENV) in the Faculty of Civil Engineering and Geodetic Science, “International Horticulture” in the Faculty of Natural Sciences, or the interdisciplinary course “European Studies” in the Faculty of Humanities have been established and expanded.**

As the first port of call for international students, the International Office organises events to welcome new students, arranges for student tutors and organises regular leisure activities. In cooperation with Student Services, the International Office helps international students to find accommodation. The costs of accommodation, food, health insurance, study materials etc. lie between € 500 and € 600 per month.

### Living in Hannover

As state capital, Hannover is the economic and political centre of Lower Saxony and is internationally famous as the site of the world's largest computer fair CeBIT.

Situated in the heart of Germany, Hannover provides a wide range of cultural facilities, sports activities, colourful festivals, interesting shopping opportunities and plenty of green spaces to relax in.



Photo: Leibniz Universität Hannover

One of the most famous parks is the Georgengarten, directly adjacent to the university's main building Welfenschloss. Culturally, Hannover has a lot to offer: Sprengel Museum, Wilhelm Busch Museum, Kestner Society, classical music, ballet, opera and “Literarischer Salon”. In addition, jazz clubs, pubs and the bustling lanes in the historic centre provide varied and attractive evening entertainment.

The paths along lake Maschsee and the rivers Ihme and Leine are ideal places for joggers, walkers, skaters or people just out for a stroll. The University Sports Centre has an extensive programme of activities – from aqua fitness to yoga, and from skiing to football.



**GREEN CITY OF UNIVERSITIES AND TRADE FAIRS**

Photo: Leibniz Universität Hannover

### The Karlsruhe Institute of Technology – new dimensions in teaching, research and innovation

At the former Universität Karlsruhe, a number of famous personalities worked or studied: Heinrich Hertz, proved the existence of electromagnetic waves – laying the basis for modern communication technology; Carl Benz later build the first automobile, Fritz Haber developed the Ammonia synthesis.

Today, KIT is one of Germany's nine elite universities after its success in the Excellence Initiative. This was largely based on the unique idea to merge the Universität and the Forschungszentrum Karlsruhe into the Karlsruhe Institute of Technology (KIT).

There, both partners join their forces and establish an institution of excellent research and teaching in the natural sciences and engineering, its main focus.

### The KIT focuses primarily on natural sciences and engineering.

Some 18,500 students currently receive practice- and future-oriented education in eleven faculties and more than 120 institutes. KIT thus is internationally one of the strongest research universities. The core research areas are Energy, Nano and Micro Scale Sciences, Elementary Particle and Astroparticle Physics as well as Climate and Environment. Other focuses are Networked Adaptive Systems, Applied and New Materials, Mobility as well as Optics and Photonics.

With near to 20 percent international students, contacts to academic institutions primarily in Europe, the Americas and the Far East, joint degree programmes with French universities, the Gdansk Institute of Technology and the Technical University in Sofia and a German-language engineering program at TWU Budapest, KIT is placed among the leading institutes in Germany.



The Audimax (main lecture hall) at the KIT

**KIT is setting new standards in teaching and in the promotion of young scientists and is attracting the best minds from all over the world.**

The International Department (ID) at the university is the first of its kind in Germany: There are three English-language "Schools" that are closely linked to the industry and operate internationally:

- The CARL BENZ School of Engineering with an English-language bachelor's degree in mechanical engineering and an English-language master's degree in electrical engineering for especially qualified international students ([www.carlbenzschool.de](http://www.carlbenzschool.de))
- The HECTOR School of Engineering & Management with five part-time master's programmes for executives as an advanced vocational training for engineers, economists and computer scientists ([www.hectorschool.com](http://www.hectorschool.com)).
- The Karlsruhe School of Optics & Photonics (KSOP) with a special master's programme in Optics & Photonics and a well directed support for PhD students within this field ([www.ksop.de](http://www.ksop.de)).

#### International Flair

The International Office is the central institution for International Affairs and offers counselling and advising services for international students, for instance through the internet portal WIRE, a source of information on studies in Germany and Karlsruhe ([www.wire.uni-karlsruhe.de](http://www.wire.uni-karlsruhe.de)).

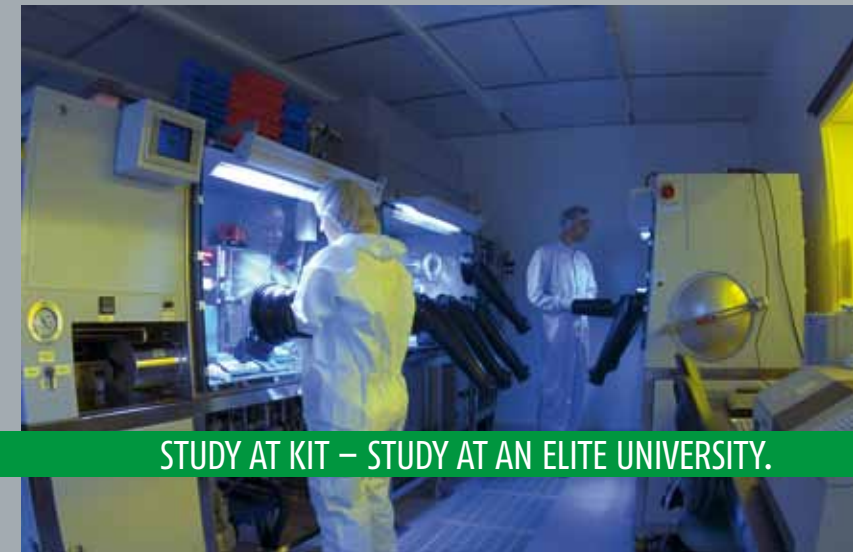
The ERASMUS student group holds weekly social meetings and supports newcomers in the orientation phase, e. g. by providing tutors.

### Living in Karlsruhe

Centrally located and yet in green surroundings: the Campus of approximately 60 hectares is situated in a central location between main street Kaiserstrasse and immediately adjacent to the Hardt Forest. The proximity to France and the mild climate of the Upper Rhine Valley create an almost mediterranean atmosphere in the capital of the former Baden state.



Founded in 1715, the city lies in the south west of Germany, in the State of Baden-Württemberg. Students have to reckon with around € 700 per month for living expenses. Halls of residence are available at reasonable prices, with average rent costs of € 300 per month. Those interested in a place in a hall of residence are recommended to apply early with Student Services ("Studentenwerk", the body responsible for allocating places in halls of residence also acting as an agency for privat rooms).



**STUDY AT KIT – STUDY AT AN ELITE UNIVERSITY.**

## TU München –

### Top-level Research in the Heart of Bavaria

*TU München was founded in 1868 by King Ludwig II. The founding vision was to "set the industrial world ablaze with the spark of science". Building on this vision, TU München has become one of the leading universities in Europe. Within the framework of the Excellence Initiative, it was awarded the status of an elite university in 2006, as one of three German universities.*

With some 24,500 students, 420 professors and approximately 7,000 further members of staff (including the hospital), TU München is of a manageable size. TUM has three principle campuses in Munich, Garching and Weihenstephan. Additional sites are TUM's hospital complex "Right of the Isar", the central university sports facilities in the Olympic Centre, a series of further locations in Bavaria and the German Institute of Science and Technology in Singapore.

As far as the range of subjects is concerned, TU München is in a unique position in Europe. The fully developed natural sciences and engineering sciences are complemented by medicine and life sciences.

**Most courses are based on external practical work, either in industry or in scientific partnerships.**

Cross-disciplinary research is common in doctoral dissertations, master's and Diplom theses and in the new international degree courses. TU München currently offers some 100 programmes of study leading to a variety of degrees. In accordance with the Bologna agreement we are changing to the system of bachelor's and master's degrees, while keeping the title "Diplom-Ingenieur" as a trademark.

*At home in Bavaria –  
successful in the world.*



*Auditorium maximum (main lecture hall) on the Arcisstraße main campus in Munich*

## TUM is part of a network of around 400 international partner universities.

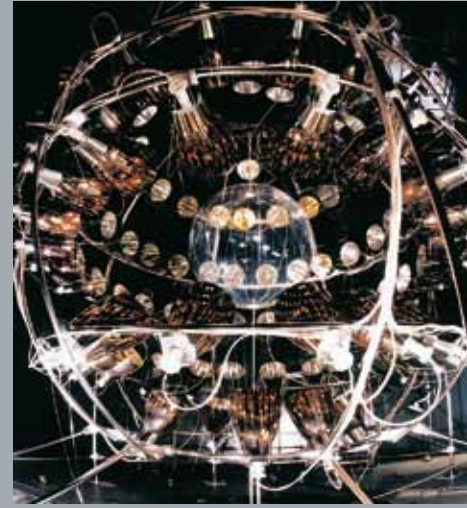
20 per cent of the students at TU München come from abroad. TU München sees a study period abroad as an essential part of a student's training. For this reason, TUM is a member of various university networks for academic exchange in the whole of Europe, as well as maintaining cooperation agreements with academic institutions worldwide.

With more than 250 European universities we have exchange programmes, sponsored by the ERASMUS programme. With TUMexchange, we provide support for studying at 34 partner universities in nine foreign countries. Our LA-OTSE programme combines studying and practical work in several countries of South East Asia.

### Living in Munich

Munich, the capital of the Free State of Bavaria, is one of the most attractive cities in Germany. In Munich, the "world-class city with a heart", tradition and progress go hand in hand.

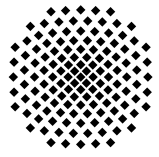
Munich has everything to make it an attractive place to live in: a centre with numerous churches and magnificent baroque, gothic and classical buildings. A wealth of museums, theatres and concert halls. And: Munich is green. Numerous parks like the English Garden or the banks of the River Isar provide breathing space. Not to be forgotten are the more than 80 beer gardens. Munich is world famous for its Oktoberfest, celebrated every year at the end of September, and the local football clubs Bayern Munich and 1860 Munich. Munich's high quality of life can only be topped by the surrounding area: the Alps with their skiing and hiking areas are only one-and-a-half-hour's drive away and Italy is „just around the corner" so to speak. Several Lakes in the region, like Lake Starnberg, Ammersee, and Tegernsee, offer rest and relaxation.



*Photo: Andreas Heddergott / TU München*



Finding a place to live in Munich takes time. A single room in a hall of residence costs between € 150 and € 250 per month. There are only 13,000 places in halls of residence for some 80,000 students. This leads to waiting times of between one and four semesters for a place. Alternatively, student services Munich also arranges for private accommodation, either in shared flats or subleases. Average prices here are € 261 per month.



## Universität Stuttgart Germany

### Universität Stuttgart – A Research University of International Standing

The Universität Stuttgart lies right in the centre of the largest high-tech region of Europe. We are surrounded by a number of renown research facilities and have such global players as Daimler or IBM as our neighbours. We were founded in 1829 and over the years this technical institution has developed to the research intensive university that it is today. Our main emphasis is on engineering and the natural sciences. However, combining these areas with the humanities and the social sciences adds something special to our profile.

Indicators of our excellent status are the two projects that were successful in the recent "Excellence Initiative" sponsored by both the Federal and the State governments. One project is the **Cluster of Excellence "Simulation Technology"** and the other, the **Graduate School "Advanced Manufacturing Engineering"**. We are also involved in a number of Collaborative Research Centres and Research Training Groups.



Photo: Universität Stuttgart



Photo: Universität Stuttgart

our future. Behind this lies the vision of undertaking research on the whole life-cycle of a product. This involves not only the technical engineering implementation but also the evaluation of the sustainability of the technical innovations.

### We have become one of the most popular education institutions world-wide for the subjects we offer.

Around 20,000 students are enrolled in the courses offered by the 150 institutes in 10 different faculties. We offer some 80 degree programmes, most of them are at the Bachelor and Master levels in accordance with the Bologna Agreement. We also have seven international MSc-degree programs that are taught entirely in English. In addition, we offer numerous activities that are tailor-made for our international partners.

Our International Centre offers a "Welcoming Service" for international freshman as well as an "Orientation Week" at the beginning of each semester. New students are picked up on arrival and taken to their accommodation, they are accompanied when they go to the German authorities and are shown around the campus and the city of Stuttgart. They are also given information on excursions and other social activities. The International Centre also offers intensive German language courses.

### "Technology, Knowledge and Education" is the motto of the Universität Stuttgart.

Our research activities are concentrated around eight interdisciplinary areas, "Modelling and Simulation Technology", "New Materials", "Complex Systems and Communication", "Concepts of Technology and Technology Evaluation", "Energy and the Environment", "Mobility", "Integrated Product Design and Production Organisation" as well as "Design and Technology of sustainable Living Spaces". We are going to strengthen our research through interdisciplinary networks of cooperation in order to continue to expand our cutting-edge position in these fields. We are going to increase our international presence and concentrate on themes that are of central importance to

[www.uni-stuttgart.de](http://www.uni-stuttgart.de)

### Living in Stuttgart

As a campus university on two sites, with attractive local recreation opportunities, and close integration into the cultural life of the city, the university guarantees its students the best conditions for studying and a wide range of career prospects for its graduates.

The cost of living in Stuttgart is around € 750 per month. A single room in a hall of residence costs between € 200 and € 400 per month.

The University Sports Centre offers a wide range of activities, from traditional sports and challenging activities such as hang-gliding, to countryside sports like climbing or mountain biking and sports excursions.

At the heart of Europe's leading high-tech region, Stuttgart is at the same time one of the greenest cities in Europe. The 590,700 inhabitants of Baden-Württemberg's state capital also enjoy top-quality cultural institutions and a broad range of leisure activities.



Photo: Universität Stuttgart



Photo: Universität Stuttgart

Nature lovers find many opportunities for walking, climbing or winter sports in the nearby Swabian Alb and the Black Forest.

There can be only one reason why Stuttgart is also known as "car city": both Daimler and Porsche have their headquarters here.

The football club VfB Stuttgart is famous well beyond the city limits. The Stuttgart State Opera, the International Bach Academy and the State Gallery Stuttgart are all cultural institutions with an excellent reputation.



Photo: Universität Stuttgart

GATHER KNOWLEDGE – LIVE CULTURE – ENJOY NATURE

# APPLICATIONS & ADMISSIONS

## Applications and Admissions

You have decided to study at one of the TU9 Institutes of Technology.

Many courses start in the winter semester only. Registration is possible until the end of September / beginning of October, depending on the university. For the summer semester registration is possible until the end of March / beginning of April.

For subjects with admission restrictions (Numerus Clausus) the deadline for applications is usually July 15<sup>th</sup>. (Summer semester January 15<sup>th</sup>).

Some universities have an earlier deadline for applicants from non-EU countries. This gives applicants from outside Europe enough time to apply for a visa.



## Where do you apply?

With a German Abitur or its equivalent from an EU-country (and the necessary German language skills) you fulfil the requirements to be admitted directly to a German university. If you have a different foreign qualification or the International Baccalaureat, please check whether this entitles you to study in Germany.

For information, ask the careers and study advisor at your school, or visit [www.anabin.de](http://www.anabin.de).

In most cases your application for the subject of your choice should be addressed to the Immatrikulationsamt/Studierendensekretariat (Admissions Office / Students Office) or to the Akademisches Auslandsamt (International Office) of the TU9 member.

**Please note:** For international applicants without a German Abitur applications to TU Berlin and to Leibniz Universität Hannover are checked by ASSIST: [www.uni-assist.de](http://www.uni-assist.de).

For certain subjects with admission restrictions (e.g. medicine, pharmacy, and psychology), German and EU citizens must apply through the German Central Council for Admissions ([www.zvs.de](http://www.zvs.de)).



# MORE WOMEN AT TU9!

## Projects for women at TU9

Specialists with degrees in the fields of mathematics, informatics, natural sciences and technical subjects – in German these subjects are shortened to MINT – have got many different possibilities of work and excellent career prospects. Even though the proportion of female students in engineering and natural sciences programmes at TU9 universities has increased considerably in these past years and is now at a satisfyingly high level, the member universities are continuing their efforts to enthuse young women for a programme in these subjects. To this end, there exist numerous initiatives at the TU9 universities such as for example the so-called “Girl’s Day” for pupils, special mentoring programmes for female students and career networks for graduates. Further information on these offers is available at: [www.tu9.de/mehrfraueninmintfaechern](http://www.tu9.de/mehrfraueninmintfaechern)



Franciska, 20 years, is from Hungary and studies Mechatronics at TU München.

“I am enthused by mechatronics as it is really an interdisciplinary subject and I can work later on in many different branches of industry. I have chosen to study in Germany because I appreciate the practice-orientation of the German education system in the fields of technology and research.”



Hale Yilmaz, 26 years, is pursuing her PhD at RWTH Aachen in business engineering and management. She originates from Turkey.

“I have picked industrial engineering and management as my course of studies because I embrace the challenge to find answers to cross-company problems with both an operational as well as a technical background. I had absolutely no problem to get used to the German way of life and felt at home right from the start.”



Demelza, 21 years, came from Bolivia to study technological communication at RWTH Aachen.

“Technological communication appeals to me very much because it combines two fields of studies, namely information technology and communication studies, and allows me to pursue my interest both in technical as well as in social matters. Germany offers much better study opportunities than my homecountry so I decided to come here.”



Diana, 25 years, is from Peru and studies Bioengineering at Karlsruhe Institute of Technology.

“The interdisciplinary and future-orientation of bioengineering are really super. The broad training in this study programme enables me to take up work in many different sectors: I can work in pharmaceuticals, the food or the cosmetics industry as well as in environmental bioengineering. Germany gave me a first-class education when bioengineering was not yet very much offered abroad.”

# DEGREES

## Degrees

Many European countries, including Germany, have changed the structure of their higher education system. A trans-European credit system has been introduced, bringing European degrees into line with each other and enabling students to change universities more easily.

In Germany the traditional German titles (Diplom and Magister) have been replaced by the new "Bachelor" and "Master" degrees. In the undergraduate phase now lasting 3-4 years, you can study for a bachelor's degree. The second phase leads to a master's degree after 1-2 years.

**Bachelor's and Master's degrees have recently been introduced.**

The TU9 Institutes of Technology recognise each other's degrees. This means that if you have taken a Bachelor's degree at one of the TU9 universities, you should have no problems transferring to another TU9 university for your Master's degree. With the introduction of the new system, the TU9 universities place particular emphasis on maintaining the excellent quality of the university "Diplom-Ingenieur" training.

Traditional degrees at German universities used to be Diplom, Magister Artium, and the State Examination, which were usually taken after 4.5 to 5 years of study.

Courses preparing for professions under German state supervision still lead to the State Examination: e.g. teaching degrees, law, food science or medicine.



Degree	Description	Duration
Bachelor's	undergraduate degree (1st study phase)	3-4 years
Master's	graduate degree (2nd study phase)	1-2 years

**What will happen to the title "Diplom-Ingenieur"?**

For more than 100 years, the title **"Diplom-Ingenieur"** has been a trademark of the German engineering profession with its high international reputation.

This is why the TU9 Institutes of Technology would like to continue with this degree even though the "Master" title is being introduced for international use. With the "Master" degree, the qualification profile of an engineer trained at the TU9 Institutes of Technology will remain on the same high level as the "Diplom-Ingenieur". At the TU9 universities, a bachelor graduate is regarded to have taken the first steps to become an engineer, but is not yet a fully fledged TU9 engineer.



# DOCTORATE

## TU9 Doctoral Degree in Engineering

A TU9 doctorate is an outstanding postgraduate qualification for high-tech researchers and industrial managers.

Our members train two thirds of German Doctors of Engineering. The doctorate in engineering is a process of research based on graduate studies, in which the candidates acquire R&D competence, management capabilities, teaching experience and skills in leadership and international relations. At the heart of the doctorate is a research project. Candidates usually are not registered as students but mostly employed in a full or partial position at the university. Their primary task is research within a project. TU9 universities also run graduate schools.



Photo: Karsten Eckold/TU Dresden

# MONEY MATTERS

## Money Matters

*The cost of living for students in Germany is comparable to that of other European countries.*

Some states (such as Bavaria, Baden-Württemberg, North Rhine-Westphalia, Lower Saxony) have introduced student fees of € 500 per semester which are still considerably lower than those charged for instance in Great Britain or the US.



**Studying in Germany is still not expensive, and there are many ways of financing one's studies.**

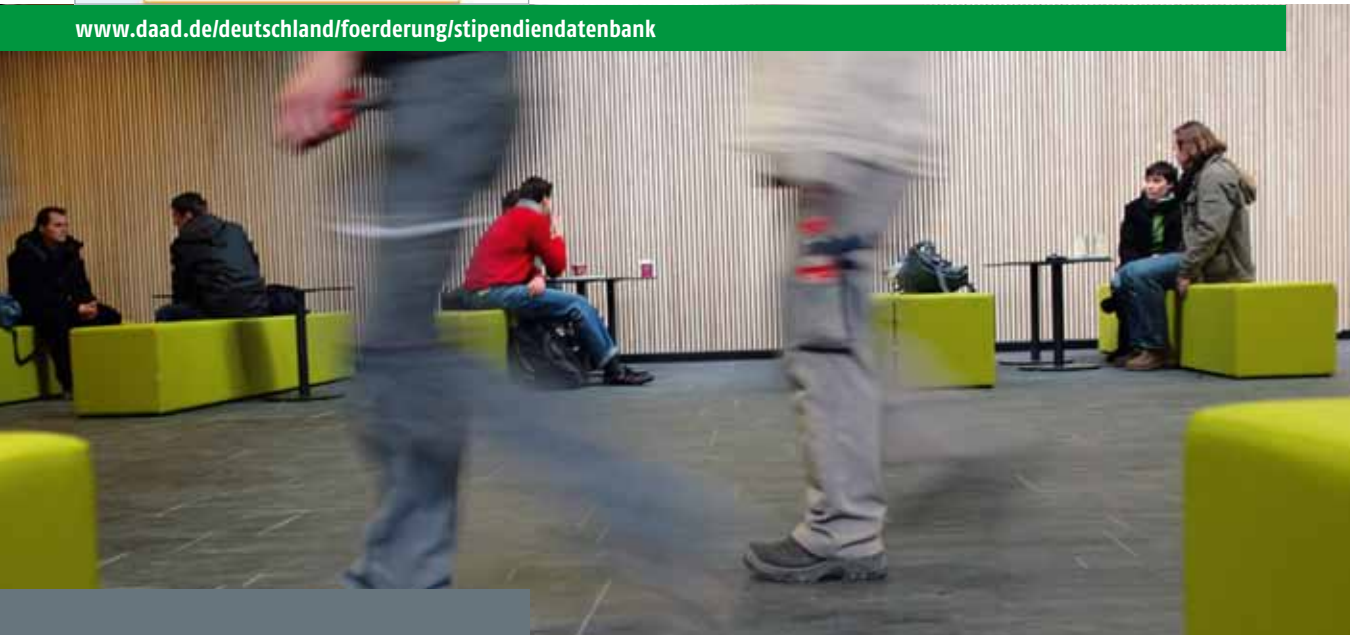
Working as a student assistant at the university is an excellent way of applying your knowledge in research projects while earning money. In addition to that, university institutions such as the international office, student services and many others employ students on a part-time basis.

### Other ways of financing your studies:

Scholarships are listed in the scholarship data bank of the DAAD: [www.daad.de/deutschland/foerderung/stipendiendatenbank](http://www.daad.de/deutschland/foerderung/stipendiendatenbank)  
After entering your subject and country of origin you soon receive an overview of possible scholarships. Most sponsors do not support an entire course of study but part of it. It is only possible to apply when one is already enrolled as a student at a German university.



[www.daad.de/deutschland/foerderung/stipendiendatenbank](http://www.daad.de/deutschland/foerderung/stipendiendatenbank)



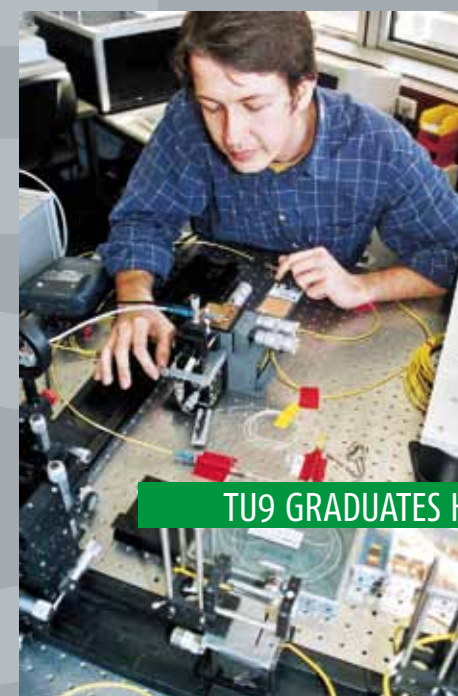
# CAREERS

## Careers

Almost 10% of the around 1.8 million international students worldwide are enrolled at a German university. German higher education combines tradition and modernity. The TU9 campus is characterised by being international, interdisciplinary, practice-oriented and varied.

The "unity of research and teaching" in Germany is the cornerstone of pioneering research and enjoys an outstanding international reputation.

The TU9 Institutes of Technology work closely together with regional industry and independent research institutions. Applied research and cooperation agreements with multinational corporations or research institutions are part of daily life at the TU9 Institutes of Technology, and strengthen the competitiveness of their graduates.



German companies are interested in well-qualified university graduates who will take up managerial posts in Germany or back home after taking their degrees.

**TU9 GRADUATES HAVE EXCELLENT CAREER PROSPECTS**

## TU9 network for Alumni of German Schools Abroad

TU9 enlarged its informational service for German Schools Abroad by another measure and founded TU9 DANA (German Schools Abroad – Network for Graduates) to look even better after graduates from German Schools Abroad who study at TU9 universities.



[www.tu9.de/DANA](http://www.tu9.de/DANA)

### Become an ambassador for TU9!

The network provides its members with the opportunity to get to know other graduates from German Schools Abroad who study at a TU9 university and to enlarge their social network Germany- and worldwide! The members of TU9 DANA are involved as voluntary TU9 ambassadors to their former German Schools Abroad and help future German School graduates during the initial phase of their studies in Germany. Apart from this, TU9 organises on a regular basis interesting workshops where members of TU9 DANA can train their soft skills such as for example intercultural communication.

The network is constantly growing and has got members from more than **30 countries** in 4 different continents. Meet some of the TU9 members already and get in touch with them:  
[www.tu9.de/dana/mitglieder](http://www.tu9.de/dana/mitglieder)



## CONTACT



TU9 provides a special service: Information and advice on conditions and opportunities for students at TU9 Institutes of Technology.

We are happy to provide you with the relevant contacts to answer your questions.

TU9 German Institutes of Technology  
Anna-Louisa-Karsch-Str. 2  
D-10178 Berlin . Germany

Telephon: + 49 (0) 30-2787 476-80  
Fax: + 49 (0) 30-2787 476-88  
E-Mail: [studies@tu9.de](mailto:studies@tu9.de)

Web: [www.tu9.de](http://www.tu9.de)  
[www.tu9.de/studies](http://www.tu9.de/studies)  
[www.tu9.de/mehrfraueninmintfaechern](http://www.tu9.de/mehrfraueninmintfaechern)



[www.tu9.de](http://www.tu9.de)

**Imprint**

**Published by:**

TU9 German Institutes of Technology

Anna-Louisa-Karsch-Str. 2

D-10178 Berlin . Germany

Executive Secretary:

Venio Piero Quinque, LL.M/LL.B, M.A.

**Available from:**

TU9 German Institutes of Technology

Anna-Louisa-Karsch-Str. 2

D-10178 Berlin . Germany

Telephon: + 49 (0) 30-2787 476-80

Fax: + 49 (0) 30-2787 476-88

E-Mail: [office@tu9.de](mailto:office@tu9.de)

[www.tu9.de](http://www.tu9.de)

5th edition 2011: 6.000 exemplar

**Design:**

Layout / production:

Pfefferkorn & Friends GmbH,

Bautzner Straße 132 · 01099 Dresden

Photos: TU9 Verband