Earning a Doctorate in Germany

DAAD

Deutscher Akademischer Austausch Dienst German Academic Exchange Service

Requirements
Programmes
Career Prospects

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Earning a Doctorate in Germany

A doctorate is a decision for life, an investment in your future – but also a time-consuming challenge that needs to be given careful consideration. A doctorate demands a great deal of energy, discipline and perseverance. In Germany some 25,000 graduates successfully complete the doctoral process every year – far more than in any other European country. And increasing numbers of up-and-coming international researchers are coming to Germany to write their doctoral dissertations, to complete their doctorates as members of research teams: since 1997 the number of foreigners registered as doctoral students in Germany has more than doubled to just under 17,000.

The German doctorate enjoys an outstanding reputation in all disciplines. And today universities and research institutions between Aachen and Zittau present young researchers with many different paths to a doctorate. Especially the structured doctoral programmes that have been established over recent years offer international graduates extremely attractive opportunities - as a member of a research team that provides intensive support and swift results. Nevertheless, there is no single ideal path to a doctoral degree. That is why this brochure aims to present an overview of the different forms of doctoral research - from traditional individual supervision to the structured programmes at graduate schools, research training groups and the International Max Planck Research Schools. It should also help by providing a lot of useful information on the formal requirements as well as different forms of funding. International students who have decided to do a doctorate in Germany will also have their say: they report on their everyday routine and their experiences, offer tips and words of encouragement for other scholars considering taking up the challenge of doctoral research. Human resources consultant Dr. Tiemo Kracht confirms that this decision is worthwhile: "In any event, doing a doctorate in Germany is a benefit." However, he also explains that the important thing about a doctorate is not the academic title, but the satisfaction of getting to grips with complex subject matter. And that has its own lasting merit - irrespective of your subsequent career.

We hope you have an enjoyable and informative read.



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Web addresses lead to more detailed information on each topic.

Long versions of the interviews with experts are available online at www.daad.de/promotion

A Doctorate Involves Research: Research in Germany

Higher Education Landscape

Roughly two-thirds of the 360 higher education institutions (universities, universities of applied sciences, colleges of art and music) in Germany are state-run. In contrast to many other countries, private higher education institutions play only a minor role. Well over 90% of the students in Germany attend a state-run institution of higher education. The principle of the "unity of research and teaching" applies at universities: in other words, they are teaching institutions and centres of advanced research that engage in intensive interchange with scholars and research institutions in and outside Germany.

German Research Foundation (DFG)

The DFG is the central, self-governing research organisation and the most important funder of research in Germany. Germany is a world-class centre of scholarship and research. German universities and research institutions are among the best in the world. There are many reasons for this: for example, the large choice of higher education centres and types of institution - namely some 165 locations with 360 higher education institutions including 140 entitled to award doctorates (universities of applied sciences do not have this right). Additionally, Germany can offer a wide range of subjects (more than 5,000 different study programmes from agriculture to zoology), well-equipped research establishments as well as highly qualified staff and an increasingly international orientation.

Germany is one of the world's most attractive centres of higher education: some 235,000 foreigners study here (including 56,000 with a German school-leaving qualification). That means that more than one in ten students holds an international passport and Germany is the most important host country for international students – after the USA and the UK.

However, top research is not only conducted at universities. Hundreds of non-university research establishments offer ideal working conditions rarely matched anywhere in the world. The most productive research organizations include the Max Planck Society, the Helmholtz Association, the Leibniz Association and the Fraunhofer Society. The Helmholtz Association alone – with 16 research centres and 8,000 staff – has an annual budget of roughly 2.8 billion euros. Since the Max Planck Society was founded in 1948, researchers at its 76 institutes have been honoured with 17 Nobel Prizes – in addition to numerous other international awards.

Excellence clusters

The German higher education landscape stands out because of the close cooperation between universities, research institutions and industry. Research institutions and business enterprises come together at the regional level in "excellence clusters" to pool their innovative force. That is also why Germany is one of the leading countries in innovative, forward-looking research fields such as environmental technology and nanotechnology. This applies to research and industry: for example, Germany ranks third in relation to patent registrations in nanotechnology and fourth in



Modern surroundings: Norman Foster, the leading British architect, designed the Philological Library at FU Berlin



nanoscientific publications. In the environmental field, Germany holds a leading position among the OECD countries in terms of the proportion of gross domestic product spent on research and development.

German universities also enjoy great international recognition in the humanities and social sciences. Innovative researchers and prize-winners teach at German universities. Humanities specialists and social scientists have won 58 of the 270 Gottfried Wilhelm Leibniz Prizes, the most highly endowed German research award, that have been presented since 1986.

Structured doctoral programmes

Doctoral students in Germany are part of this research process. Gaining a doctorate is seen as the first phase of a research career. That also explains how the traditional process of attaining a German doctorate differs in many respects from the Anglo-American PhD system, in which the PhD student merely acquires a degree. However, German higher education is in the midst of a far-reaching process of renewal and many universities already have what are known as structured doctoral programmes and research training groups (Doktorandenkolleg). Additionally, re-

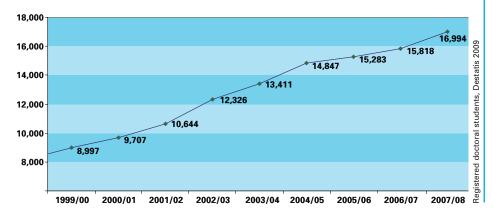
Doctorates – Germany Ranks First in Europe

USA	56,067
Germany	24,946
UK	16,456
Japan	15,979
France	9,818
Italy	9,604
An international comparison of completed doctorates in the OECD countries (in absolute terms, 2006), source: OECD	

search schools and centres comparable to Anglo-American graduate schools have also been established in collaboration with non-university institutions such as Max Planck Institutes or the **German Research Foundation** (Deutsche Forschungsgemeinschaft, DFG). Their structured doctoral programmes enrich the higher education system and expand the opportunities for international students to gain a doctorate in Germany.

Many scientific organizations and research institutions support young international scholars with project funding, scholarships and prizes. The most important are the Federal Ministry of Education and Research (BMBF), the DFG and the **German Academic Exchange Service** (Deutscher Akademischer Austauschdienst, DAAD).

Increasing Numbers of International Doctoral Students in Germany



Advanced scientific research: Max Planck Institute for Plant Breeding Research. Cologne

German Academic Exchange Service (DAAD)

The DAAD, a joint agency of institutions of higher education in Germany and major funding organization, supports international relations in the higher education sector. As a rule, its programmes and projects are open to all disciplines and countries and benefit Germans and non-Germans alike. The DAAD maintains a worldwide network of offices, lecturers and alumni associations and also offers guidance abroad.



www.daad.de

The DAAD website offers everything you need to know about higher education in Germany. A scholarship database helps users find appropriate funding opportunities (German, English, Spanish).

www.research-in-germany.de

This Internet portal is aimed at international scholars and provides a great deal of useful information about the research landscape in Germany. It also highlights recent developments in German higher education and offers advice and guidance for research visits (German, English).

www.hochschulkompass.de

The German Rectors' Conference (HRK) provides information about study programmes and international collaborations at this address. A database enables visitors to search for doctoral programmes, for example, or the names and addresses of contacts at universities (German, English).

Structured or Traditional? Paths to a Doctorate

Supervisors

In German the supervisor of a doctoral student is known as Doktorvater or Doktormutter (literary "doctor father" or "doctor mother"). No one has an automatic right to be accepted as a doctoral student by a professor. In all cases outside structured programmes acceptance by a supervisor is the prerequisite for recognition as a doctoral student by a university and admittance to study and/or take the doctoral examination.

Research Training Groups

A group of researchers study a topical subject within these temporary organizations. Research training groups are funded by the DFG, universities or foundations. With 10 to 20 doctoral students, these groups are manageable and enable very intensive support. Research training groups are interdisciplinary in nature and offer doctoral students tailormade seminars and programmes. As a rule, a doctorate takes three years in such a group (see page 17).

Graduate Schools

The graduate schools established under the auspices of the Excellence Initiative are much broader in scope and more interdisciplinary in nature than the thematically more focused research training groups. Participants are integrated in a team in which they regularly present their results. Admittance is dependent on a performance-based selection procedure. Interviews are even conducted by video link for foreign students (see page 17). Where's the best place to study for a doctorate? Douwe Bonthuis had no trouble answering this question. "My subject was the decisive factor," says the Dutchman. For the last two years he has been researching a biophysical question at the TU Munich. "The group working with my professor, Roland Netz, is considered one of the best in Europe."

If you decide to do a doctorate in Germany, you can choose between two different approaches. Students who take the traditional route must first find a **supervisor** (Doktorvater or Doktormutter) before they can start on their doctoral dissertation, which they complete very much on their own. This very free system with no compulsory attendance, deadlines or binding curriculum calls for a great deal of personal initiative. Doctoral students are very much left to their own devices. However, for someone like 27-year-old Douwe Bonthuis, who wanted to complete his doctorate with a particular specialist, this so-called "apprentice model" is very appropriate. The vast majority of doctoral students in Germany - according to data published by the German Science Council, some 90% – still select this approach.

Additionally, however, a second route to a doctoral degree is gaining in popularity and attracting increasing numbers of students:

Pros and Cons: Traditional Doctorate

• Although the "apprentice model" demands a high degree of individual initiative, it also offers doctoral students a great deal of freedom and enables them to shape their own doctoral research.

• It is particularly well suited for doctoral students who would like to study for a doctorate with a specific professor.

 The traditional path offers great freedom in the choice of subject for the doctoral dissertation (particularly in the humanities and social sciences).

Finding a suitable supervisor can prove difficult. He or she should be an expert in the field, but also have certain it involves completing a doctorate within the framework of a structured programme comparable with the PhD programmes offered by the higher education systems in Englishspeaking countries. Structured doctoral programmes are offered by:

- Research training groups organized by the German Research Foundation (DFG)
- **Graduate schools** at universities
- **Doctoral programmes** at universities
- International Max Planck Research Schools

There are already some 600 structured doctoral programmes available in Germany. Many of them are internationally oriented and conducted in English. They are usually organized by several research groups working in close cooperation, which enables research of the highest standard. Such programmes offer many advantages, especially for international candidates. These include, for example, curricular programmes, flexible admittance for Bachelor's graduates and also more general support in everyday situations. Another advantage is the relatively short time in which doctoral students can achieve their goal – as a rule, after three years. Ksenia Robbe from St. Petersburg, who is also 27 years old, decided in favour of this kind of structured doctoral programme.

qualities as a mentor. It is useful to put out feelers in the department early on, because word soon spreads about who successfully supports doctoral students.

A traditional doctorate takes longer – roughly four to five years.

The subjects of doctoral dissertations are frequently too specialized, too little integrated into research frameworks.

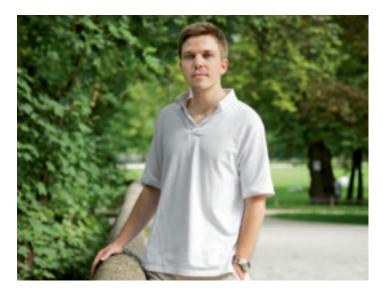
You have to take care of funding yourself.

There are few guidelines and doctoral students have to struggle through on their own.

The traditional doctoral path was ideal for me because I wanted to write my doctoral dissertation under the supervision of my professor. His research group is one of the best in Europe. The fact that I have to hold seminars does involve work, but I also benefit from that.

Douwe Bonthuis, Netherlands

The physicist is doing a doctorate at the TU Munich.



The literary studies specialist was won over by the programme at the International Graduate School for the Study of Culture at Giessen University: "Doctoral students meet with two professors every two weeks to discuss their results in special colloquia," explains the Russian researcher. "That structures your schedule enormously." If you take the traditional doctoral path, you also have the opportunity to exchange views in postgraduate seminars and colloquia, but structured programmes offer much more intensive support and encouragement.

What's best? A doctoral programme or the apprentice model? The choice hinges on a variety of factors. "First of all, it depends on the specialist interest," says Dr. Birgit Klüsener, DAAD. "For practical reasons many people remain at the university where they studied or spent a semester abroad and then just use the options that are available to them there." If you studied abroad and now want to do a doctorate in Germany, it is much easier to gain an overview of structured doctoral programmes from outside the country. Places on these programmes are advertised publicly and the application process is more transparent. Frequently support contracts are agreed that precisely define rights and obligations. That gives doctoral candidates a better idea of what is expected of them. One major difference to the traditional apprentice model is the fact that as a rule structured programmes give doctoral students two supervisors. That means their academic support does not depend on the goodwill of a single professor. An interdis-

Pros and Cons: Structured Doctoral Programmes

+ Structured programmes quickly lead to a doctoral degree – as a rule in three years.

• Supervision is carried out by several university teachers. Doctoral students are not dependent on the goodwill of a single professor.

+ The question of funding is often resolved by acceptance on the programme.

+ Foreign doctoral students are supported

in a variety of ways throughout the entire doctoral process. Assistance with everyday problems is also provided, as is personal guidance.

Applicants have to complete a multilevel application procedure. That's why you must plan ahead and leave enough time for the application process.

The programme of colloquia and workshops is very packed. If you attempt to take all the options available, you can easily overload your timetable.

The subject of your doctoral dissertation must fit in with the programme; it is often not possible to select your own subject.

Structured Doctoral Programmes

These doctoral programmes are run at universities according to a relatively strict timetable and involve intensive support. They have a clearly defined curriculum that prescribes participation in seminars and the production of papers at specific intervals. As a rule, this kind of doctorate takes three years. I decided in favour of a structured doctoral programme at a graduate school. I like the interdisciplinary work atmosphere. Additionally, the timetable is wellstructured and there are lots of interesting seminars on offer.

Ksenia Robbe, Russia

The literary studies specialist is studying for a doctorate at the International Graduate School for the Study of Culture in Giessen.



Differences between Subject Groups The kind of doctorate candidates choose depends on the subject:

Humanities and Social Sciences

Large, interdepartmental research projects are rarer here than in the natural sciences. Although the traditional apprentice model is still prevalent, a growing interest in structured programmes is evident here too. A recent study focusing on international doctorates in Germany (HIS), which involved an online survey of doctoral students at 20 universities, shows that so far some 15% of humanities specialists are involved in structured programmes. One quarter of doctoral students are employed as research assistants at university and non-university institutes. A little over half of all up-and-coming researchers in the humanities conduct their research alone.

ciplinary framework also enables students to look beyond their own noses. "Different disciplines work within the graduate school, so I also have dealings with historians and ethnologists," emphasizes English studies specialist Ksenia Robbe. "I could already sense the open-minded work atmosphere on the website – that was a very important criteria for me."

The programme in Giessen relies on multilevel monitoring. Doctoral and postdoc scholars from different disciplines work together in what are known as "research areas". "Everyone can present his or her project in these courses and receives feedback from very different directions," says Ksenia Robbe. Interchange also functions very well on an informal level because all the doctoral students are in the same building. "It's great that I

Most Popular I	Ooctorate Subjects
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Biology	14.2%
Chemistry	11.6%
Medicine	10.6%
Physics	8.4%
Mechanical Engineering	4.0%
Electrical Engineering	3.7%

Subjects with the most doctorates by foreign students, 2007 (of a total of 3,499 passed examinations), source: Destatis only have to walk across the corridor to discuss a question," enthuses the Russian researcher. She makes full use of the graduate school's many opportunities. She has courses two or three days a week and heads a seminar for students herself every Monday. It's a voluntary arrangement, not an obligation. "I choose the subjects myself and structure and develop the course," says Ksenia Robbe.

For Douwe Bonthuis, who is taking the traditional path to a doctorate, teaching is part of his contract. The Dutchman has a part-time (three-quarters) post at the TU Munich and is well able to live on the salary. He has to teach five seminars, each of them on a different subject. In the beginning he was not very enthusiastic about this obligation. Today, however, he sees the advantages: "Seminars involve a lot of work, but they offer a good opportunity to gain teaching experience and to revise fundamental principles." The natural scientist spends the remaining time doing research - very traditionally on his own. "In experimental physics, of course, the situation is very different," explains Douwe Bonthuis. "Work in the laboratory is always done in a team, you exchange opinions and discuss your findings." He decided very consciously in favour of a doctorate in the



field of theoretical physics. He meets with his supervisor twice a week, the working group comes together once a week. The **differences between subject groups** are considerable: while humanities specialists or social scientists often work on their doctorate alone, natural scientists and engineers are more likely to have doctoral posts and work with colleagues within their respective department. This is a development that is now also emerging in other disciplines. DAAD expert Birgit Klüsener says, "In principle, the structured doctoral programmes are fostering a culture that has always existed in the natural sciences."

Has the traditional supervisor gone out of style? An interview with Nobel laureate Professor Erwin Neher

Professor Neher, you are the speaker of the International Max Planck Research School (IMPRS) for Neurosciences in Göttingen. Do structured programmes represent a more attractive route to a doctorate than the traditional path? Doctoral students used to be very much left to their own devices, which is not easy, especially for international candidates. The IMPRSs offer support that makes the process easier. We help students find their feet, for example, by assisting them in their dealings with authorities or establishing contacts with fellow researchers.

Has the traditional supervisor gone out of style?

It is a good system for the best, because it offers much greater freedom – provided the supervisor is committed. But that is not always the case. To that extent, supervision by a committee with several members certainly has advantages. Having to present your results before a commission once a year can add a healthy element of compulsion.

How are German doctoral degrees regarded internationally?

In our subject, very highly indeed! In biochemistry and neurosciences successful doctoral students from Germany are highly appreciated as postdoc researchers abroad.

www.daad.de/promotion

Engineering and Natural Sciences

Roughly half the doctoral students in the natural sciences (the proportion is a little higher among engineers) become research assistants and are tied into research projects from the outset. They are regarded as colleagues from their first day and gain valuable experience for their future careers. Time management is the order to the day: not neglecting your own research can become a challenge in addition to the many duties at the institute.

Medicine

Whether they are involved in clinical, experimental or theoretical research, medical scientists usually take the traditional route to a doctorate. Students should complete their doctorate before beginning their strenuous internship. In research terms, a doctoral dissertation in medicine is more comparable with a diploma thesis and involves far less input than in other disciplines.



www.academics.com

The joint website of weekly newspaper Die Zeit and specialist journal Forschung & Lehre offers a lot of topical information under the heading "Do a PhD". This includes articles on the advantages and disadvantages of a traditional doctorate and structured programmes, advice on applications and funding as well as background information on the differences between subjects (German, English).

Structured Programmes: Wide Range of Opportunities

International Doctoral Programmes

The DAAD maintains an Internet database of structured doctoral programmes in Germany. All the programmes listed have been carefully selected by the DAAD and stand out, for example, because they offer internationally recognized qualifications and are conducted partly or wholly in English (or another foreign language). Their curricula are internationally oriented and they involve, for example, periods abroad and/or participation by foreign visiting lecturers. The programmes in the DAAD database also offer special academic and general support for international doctoral students. More information is available at www.daad.de/international-programmes

Compared with other countries, found the Federal Report on the Promotion of Up and Coming Academic Research Talent (BuWIN), Germany offers the broadest range of research opportunities for doctoral students - everything from cultural studies to photonics. That's also why gaining an overview of the countless programmes on offer is not easy (see box for useful tips). In addition, each programme has its own distinct individual features. Yet a student's choice of programme can have a decisive impact on his or her success. It definitely pays off to obtain as much information as you can and, if necessary, to use the advisory services provided by DAAD offices or DAAD information centres abroad (addresses and links can be found on the DAAD website at www.daad.de/offices).

In addition to the research training groups, international research training groups, graduate schools and International Max Planck Research Schools mentioned earlier, the DAAD has also selected 188 **international doctoral programmes** that meet specific criteria. These programmes cover almost all subject areas. A particularly large number are available, however, in mathematical and scientific disciplines as well as in law, economics and the social sciences. Structured doctoral programmes of a high standard have also been established under the umbrella of the **Helmholtz Association**, Germany's largest scientific organization.

Finding the Right Doctoral Programme

There's no way around it: finding a suitable doctoral programme involves intensive individual inquiry. There is not one comprehensive overview of all the different programmes.

The following websites, for example, provide a useful starting point for research:

- www.hochschulkompass.de
- www.research-explorer.dfg.de
- Websites of the Max Planck Institutes, the Fraunhofer Society, Helmholtz Association, and the Leibniz Association
- Websites of universities and graduate centres

It is also possible to use the advisory services provided by DAAD offices and DAAD information centres abroad (see page 30).

I'm doing a doctorate in the environmental technology sector and am investigating cost-benefit analyses of waste water treatment plants. Water is an important subject in my country. I need to exchange views with other researchers. Next door there are statisticians and chemists – I can discuss results with them at any time.

Jaime Cardona, Columbia

The economist is completing a doctorate at the Helmholtz Interdisciplinary Graduate School for Environmental Research in Leipzig.



The Helmholtz Association maintains a total of 16 world-class research centres, including such well-known institutions as the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, the German Electron Synchrotron in Hamburg and the German Cancer Research Centre in Heidelberg. Special emphasis is placed on international research and key areas include interchange with China and Russia.

Doctoral research in industry

Programmes involving industrial cooperation can be particularly interesting. Research-oriented companies find it useful to attract up-and-coming researchers through doctoral programmes, while doing a doctorate in industry or business offers researchers an attractive combination of theory and practice. Many big-name German companies cooperate with universities and offer appropriate research projects. As a

rule, young researchers receive temporary contracts of employment, which also provides financial security while they complete their doctoral research. In return, they have to work in the respective corporate departments. However, combining a job and research does not only demand a great deal of discipline. The interests of university and company can differ and a subject of great scientific interest may not interest the company at all. Nonetheless, this combination has great advantages: it allows doctoral students to gain professional experience and establish important contacts. If they are employed by the company after completing their doctorate, they usually assume responsibility much faster, because there's no induction period. Companies such as Nokia Siemens Networks (NSN), Audi and BoschRexroth, for example, offer opportunities to join the business through doctoral research.

How can you use the Research Explorer (REx)? An interview with Dr. Jürgen Güdler, director of the Information Management Department at the DFG

Dr. Güdler, can you briefly explain what the Research Explorer offers?

The Research Explorer is a unique online directory of German research centres that provides central access to information about nearly 20,000 institutes at higher education institutions and non-university research establishments with just a few clicks of the mouse.

What is the service's main target group?

The Research Explorer is completely bilingual and designed to present information in German and English. It is thus aimed at an international audience – for example, young researchers who are interested in conducting research in Germany. However, established researchers and the staff of international research and support organizations will also find it a useful starting point. REx is the best means of gaining information about and from the main participants in publicly funded research in Germany from one source.

How can foreign students who are interested in doing a doctorate in Germany best use REx?

For an initial overview of the higher education institutions that offer your particular subject, you just have to select the subject and you will be presented with a list. The second step then leads to the website of the institute, which will present up-to-date information and the relevant contacts. Cooperation with another partner, the German Rectors' Conference (HRK), will make it possible to use REx to conduct direct searches of doctoral study opportunities at higher education institutions from the beginning of 2010.

Can you describe the most effective way of carrying out a search?

To gain an initial impression, you can first select a city from the map to see which institutes are available at that location. If you want to find an institute with a specific subject specialization, you use the Search Assistant to select a subject group. You can then gradually narrow down the area of research until you obtain the desired result.

www.daad.de/promotion

Helmholtz Association

The Helmholtz Association is a community of 16 scientific-technical and biologicalmedical research centres. With 28,000 staff and an annual budget of 2.8 billion euros, it is Germany's largest scientific organization. Its mission is to advance research that contributes to answering the urgent questions of science, society and industry. In the process, it focuses, for example, on questions of mobility and energy supply or on finding therapies for previously incurable diseases.



www.research-explorer.dfg.de

Research Explorer is the research directory of the DFG and DAAD. Continuously updated, it includes details of some 20,000 institutes at German higher education institutions and non-university research establishments which can be searched according to geographical, subject and other structural criteria (German and English).

www.helmholtz.de

The Helmholtz Association provides information on its website about vacancies for doctoral students under the heading "Working at Helmholtz" (German, English, Chinese, Russian).

A Doctorate: Meeting the Challenge

Doctoral Dissertation

The inaugural dissertation is an independent written work of research with which the doctoral student applies to be awarded a doctoral degree. The formal criteria are laid down in the respective university department's examination regulations. The doctoral dissertation is intended to prove the candidate's ability to carry out thorough academic research and must constitute an advance in knowledge. Presenting a dissertation is the precondition for initiating the doctoral process. Every doctorate is a challenge – from the initial choice of a suitable topic to finding an interested doctoral supervisor or an appropriate doctoral programme. The entire process, which not only involves writing a **doctoral dissertation** but also an **oral examination** and **publishing** the dissertation, can certainly have its ups and downs. Sometimes the work involved is not quite the way you imagined or relations with your supervisor turn out to be difficult. Perseverance and self-criticism are also required in order to successfully and productively complete the doctoral process.

International doctoral students are expected to be open-minded about the German higher education system (see interview), which differs considerably in many points from models in other countries. The traditional doctoral process in particular demands a high degree of personal initiative. Basically, the candidates should take the following points into account:



Dialogue and collaboration: doctoral students should try to get early feedback on their work

Motivation

Given that the topic of the dissertation will keep the doctoral student busy for several years, it should be well chosen and of real interest to the candidate. After all, the best motivation for work is to enjoy it. If you have a genuine enthusiasm for the research project, then you will persevere during difficult phases. An additional motivation is the experience of accomplishment at an early stage – for example, through publication.

Time Management

Doing a doctorate involves various tasks. For example, if you are working as an assistant in a university department, you will have teaching duties and administrative tasks to perform in addition to your research work. The best advice comes from colleagues: doctoral candidates can benefit from their experience and learn how to set priorities and structure tasks.

Cooperation

Particularly when it comes to the "apprentice model", the doctoral student is dependent on the goodwill of one university professor. This dependence is something that has to be accepted, even if this is occasionally hard. The success of your doctorate is at risk if you do not have the full support of your supervisor.

Teamwork

Research has a lot to do with communication, debate and collaboration. Working on your own for months may get you nowhere. If the regular presentation of your results is not institutionalized – as in structured programmes – then doctoral students themselves must ensure that they receive feedback on their work.

Flexibility

Supervisors often leave part of the supervision to their assistants. Doctoral candidates should therefore be open-minded and not fixated too much on one person. Exchanges of ideas with postdoc researchers take place on a more equal basis and are therefore often a lot more relaxed.

Adaptability

Every university department and every research institute has unwritten laws that have to be obeyed. Initially, you should be more reserved and get to know the new surroundings.

Working Techniques

The formal requirements of research work in Germany differ from those in other countries. Even if doctoral students have already acquired a basic research methodology during their earlier studies, they should expand their repertoire. After all, they are involved in understanding and processing a much more complex subject matter than for a first degree. Many universities provide appropriate courses for this. What do professors expect of international doctoral candidates? An interview with Professor Marion Gymnich, University of Bonn

Professor Gymnich, as one of the authors of Handbuch Promotion, a guide for doctoral students, you focused on "The Internationalization of Doctoral Training". Over the past years, the percentage of international doctoral students in Germany has risen significantly. How did that come about?

Overall there is growing interest in studying in Germany. In recent years, German universities have also begun to compete more for doctoral students at the international level, and this is now bearing fruit. A German doctorate still has a good reputation – and this applies both to the traditional doctorate and structured programmes.

As a professor, what do you expect of international doctoral students?

If you want to do a doctorate in Germany, you should be open-minded and willing to adapt to a new academic system. This starts with the very way research texts are written. They are much more formalized in Germany than in France, for example.

What should future doctoral students pay attention to when selecting a university?

One point is whether there are multilingual opportunities – and how the final examination is structured. At some universities you can be examined in English, French or Spanish, which can be helpful. In terms of content, too, there are great differences between the examinations. In Giessen, the main points in the doctoral dissertation are presented and discussed; in Heidelberg, this is followed by general questions; in Bonn, four theses have to be submitted that have nothing at all to do with the doctoral dissertation. It is important to study the examination regulations in good time.

www.daad.de/promotion



Good communication: Professor Liqiu Meng, TU Munich, in conversation with students

Oral Examination

Part of the doctoral process is an oral examination in the form of a so-called Rigorosum or Disputation. During this oral exam, the candidate presents the method and findings of his or her dissertation publicly at the university and defends and substantiates them in a subsequent discussion. As a rule, the Rigorosum constitutes a non-public oral validation of the academic qualification. In addition to these two, there are also other mixed forms.

Publication

As a rule, the doctoral certificate is only granted to the doctoral candidate when, within a certain time-limit, the dissertation is made publicly available in printed or similarly reproduced form, and when a certain number of obligatory copies have been presented to the university. The candidate then receives the right to use the title of "Doctor". Most universities now accept a variety of ways of publishing doctoral dissertations (publishing house, scientific journal, electronic form, etc.). They are laid down in the respective examination regulations.

Research Routine: "Self-Discipline Is Essential"

Research Training Groups

Doctoral research training groups combine elements of the traditional supervision of individual doctoral students with the innovations of structured doctoral programmes. These groups are supported in institutionalized form by an association of university professors whose aim is to jointly train and advise doctoral students. Compared with the traditional approach, this improved supervision is intended to considerably shorten the time required to complete a doctorate. What is more, doctoral research training groups offer more opportunities for feedback and help candidates find their place in the scientific community. This is ideal for overcoming the frequent social and scientific isolation experienced by traditional doctoral students and minimizing the risks that can arise during the doctoral process. Universities can concentrate their doctoral research training groups in centres for postgraduate studies.

Moussa Sangare has just held a conference with his working group on Skype and exchanged ideas with five other doctoral students about the next phase of their research. The 39-year-old African has been studying for a doctorate at the TU Dresden for the past two years. He is writing his doctoral dissertation on the quality of private universities in his country, Ivory Coast. Regular exchanges of ideas in small working groups and scheduled lectures and seminars are part of the programme offered by the **research training group** on lifelong learning. This encourages networking and forms a clearly defined framework, thereby integrating significant components of structured doctoral programmes.

Dresden is another example of the trend towards graduate schools and postgraduate research groups that is catching on at German universities. "We meet regularly for workshops and colloquia where we present our research findings," says Sangare. The doctoral students receive feedback from all four professors in the participating departments. These research groups are small and the working language is German which is no problem for the African student, who studied German and trained as a teacher of German in Abidjan. "If I do have a question, I simply have to go to my colleagues next door and they help me immediately." His doctoral supervisor, who already supervised his Master's, is also

available when he needs him. This dialogue is important for Sangare. Which is why he cycles to his office at the Institute for Vocational Education as early as possible every morning. Over the past weeks, he has taken advantage of every minute so as to complete the theoretical part of his work.

He opens his laptop every day on the dot of ten, works at his dissertation until early evening and then, to counterbalance this, does two hours of sport. After that, he works at his desk often until late into the night. He is surrounded by piles of books, which he was able to order and collect from the university library.

Moussa Sangare is a bit behind in his schedule. He has a scholarship from the Hans Böckler Foundation, which supports the research training group. This political foundation also expects sociopolitical involvement from its scholarship-holders, so Sangare has already written a book about the political situation in his country. Now he has to make up for the time he devoted to that publication. The scholarship is for three years, during which he has to complete his dissertation. "At the moment, my best friend is discipline."

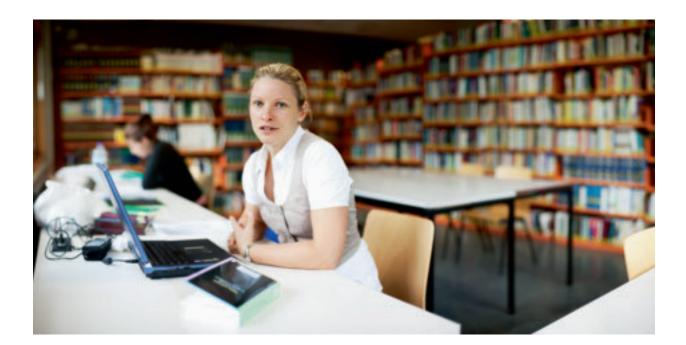
Sociologist Szilvia Major is planning to take a lot more time for her doctoral dissertation on long-term partnerships. To finance her doctorate, the Hungarian candi-

My best friend is discipline. I would like to complete my doctorate quickly. We regularly discuss our findings in workshops, which I find very helpful.

Moussa Sangare, Ivory Coast

The German teacher is doing his doctorate at the research training group on lifelong learning at the TU Dresden.





When I start on the theoretical part of my dissertation, I'll be in my university office every day and make sure my day is properly structured. I couldn't work at home.

Szilvia Major, Hungary

The sociologist is doing her doctorate at Giessen University and also advises foreign doctoral students.

date works three times a week as a counsellor for foreign doctoral students at the University of Giessen. She is clear about her career goal: "I would like to work in partnership counselling, which is what my dissertation focuses on." The 27-yearold is taking the traditional doctoral path, so she is able to combine writing her dissertation with a part-time job at her university's International Office. "I think it's important that I gather practical experience while writing my dissertaion – even if it takes longer as a result."

Szilvia Major is reckoning with a period of four or five years to complete her doctorate: "I'm still in the reading phase, when I can occasionally take a book with me to the swimming pool," she says. But when she starts on the theoretical part, she intends to work in her office at the university every morning and to lock her door from midday to devote herself fully to her dissertation. She is convinced this is a good plan: "That way, the day is structured. But it all requires self-discipline, which is why I could never work at home. I need the spatial separation." Anyone like Szilvia Major who aims to study for a doctorate on the basis of the traditional "apprentice model" relies heavily on the commitment of a single university professor. Given that she is a counsellor for international doctoral students, she hears many a lament about this particular topic. Her own experience, however, is that a committed university professor can have a great impact, even within the traditional doctoral framework. "My professor's doctoral students all meet twice a month for a weekend where he lives to present their research findings," says Major. They stay at the local youth hostel. "It's not obligatory, but it's very useful."

Szilvia Major is married to a Hungarian trainee doctor. They don't know if they want to return to Hungary. Moussa Sangare on the other hand is very keen to finish his doctorate for personal reasons. He has three children he only sees once a year. "My goal is to return home immediately after my doctorate to work there at the university and be able to lead a normal family life."

German

Although you can get by with English in many doctoral programmes and in most university towns, you will miss out on many aspects of everyday life if you have no knowledge of German. And don't forget that German is an important language of business and research. More than 100 million people speak German as their mother tongue and another 24 million people worldwide can speak the language.



blog.scholarz.net

Everything on this communication platform for junior researchers revolves around studying for a doctorate and writing a doctoral dissertation. Also of interest are the posts on "working scientifically in Web 2.0" (German, English).

Where Can You Study for a Doctorate? An Overview

Higher Education and Education Policy

Germany is a federation of 16 Länder, or states, each of which has its own, although limited sovereignty. The Federation and the Länder cooperate on educational matters, but fundamentally education policy, which also includes the administration of higher education institutions, is largely the responsibility of the Länder. The Federation is primarily responsible for the fields of educational research, vocational training, further training as well as degrees and research funding at higher education institutions.

Higher Education and Rankings

The German higher education system offers a wide range of different institutions. Germany's 360 higher education institutions include universities, technical universities, colleges of art, music and film as well as the universities of applied sciences (Fachhochschule, FH), which, however, do not have the right to award doctorates. Academic excellence is not only found in big cities. Rankings do not traditionally play a great role in students' choice of university. Reliable rankings based on various indicators of academic performance and quality have only been produced for a few years. The following rankings can be recommended:

- www.che-ranking.de
- www.dfg.de/ranking
- www.humboldt-foundation.de/ranking



Research Training Groups, Graduate Schools, Max Planck Research Schools

Research Training Groups and International Research Training Groups

The German Research Foundation (DFG) currently supports 227 research training groups (Graduiertenkolleg, GRK), including 58 international research training groups (IGK). One or more international universities cooperate with a German university in the international research training groups. Doctoral students are supported by a group at the German university and a partner group abroad. Doctoral students draw up a personal doctoral plan with a fixed time frame in conjunction with their professors. Study and research programmes are developed jointly and the doctoral students are supervised by two professors, who belong to different universities. Additionally, bilateral doctoral support entails a six-month stay abroad with the respective partner.



International Max Planck Research Schools

International Max Planck Research Schools (IMPRS) are part of a support programme for young researchers that is aimed at especially gifted German and international students. The 55 International Max Planck Research Schools at 32 locations offer an opportunity to prepare for a doctorate within the framework of a structured interdisciplinary training programme under excellent research conditions.

Special emphasis is placed on international cooperation: the research schools are especially aimed at international doctoral students, whom they wish to interest in studying for a doctorate in Germany. It is hoped that half of the students will come from outside Germany. In September 2009 the proportion of international doctoral students among the 2,100 IMPRS participants was 53%. The doctoral examination can be completed either at a German higher education institution or the student's home university.

Excellence Initiative Graduate Schools

These graduate schools are doctoral programmes funded within the framework of the Excellence Initiative. They offer structured programmes for doctoral students in an outstanding research environment. At the present time, 39 graduate schools are being funded with an average of roughly 5.7 million euros each for 5 years. Graduate schools are more broadly based than the more specialized research training groups: several departments engage in joint research on an overarching question. A great deal of emphasis is placed on the international and interdisciplinary composition of the teams. One advantage of interdepartmental cooperation is the intensive interchange between doctoral students and professors of related subject areas. Fast-track programmes can enable especially highly qualified candidates to start at the graduate school after only one Master's year. The examination can also usually be completed in English.

Binational Doctoral Programmes

Binational doctoral programmes, also known as cotutelle programmes, involve cooperation in the supervision of doctoral candidates between (at least) one international university and one German university. As a rule, this includes working visits to produce the doctoral dissertation at the participating institutions as well as the participation of external supervisors in the final doctoral examination process. Permanent partnerships have been formed, for example, in the international research training groups supported by the DFG and the 25 Franco-German graduate colleges organized under the umbrella of the Franco-German University (FGU). However, this process does not conclude with the award of a "binational" doctorate, but a doctoral degree gained on the basis of German examination regulations.



www.dfg.de/gk

The German Research Foundation (DFG) lists all currently funded national and international research training groups at this address (German, English).

www.dfg.de/exzellenzinitiative/ gsc

This is where the DFG presents an overview, including links, of the funded graduate schools (German, English).

www.mpg.de

Clicking on the "Research Schools" heading at this address takes you to an overview of all International Max Planck Research Schools (German, English).

www.helmholtz.de/ graduiertenschulen-kollegs

The Helmholtz Association supports young researchers in graduate schools and research schools (German, English).

Before You Start: First Steps Towards a Doctorate in Germany

Recognition of a University Degree

Applications for recognition of university degrees can be made at the dean's office, the respective department's doctoral admissions board or the university's international office. In some cases, final admission to the doctoral process is made dependent on a further examination to establish whether the candidate has an equivalent level of proficiency to that of a German qualification. Law faculties frequently make additional demands resulting from the differences in curricula relating to respective national legal systems.

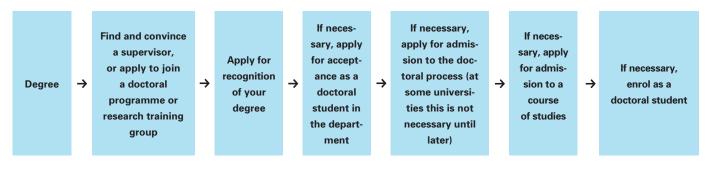
Studying for a Doctorate with a Bachelor's Degree

Particularly well-qualified foreign applicants can also be admitted to doctoral studies with a Bachelor's degree. As a rule, admission is subject to an aptitude test. This is usually preceded by a oneyear preparation period. Individual universities decide on the procedure and access to it. Decisions on admission are always taken on a case-by-case basis. Candidates should therefore contact the responsible faculty. Regulations can also be found in the respective department's doctoral degree regulations. Anyone who wants to study for a doctorate in Germany has to have **a recognized university degree**. This usually means having a qualification equivalent to a Master's degree, or a German Magister, Diplom or Staatsexamen. In exceptional cases you may also be accepted as a doctoral candidate with a **Bachelor's degree**. The next step is to find a supervisor – a Doktorvater or Doktormutter in German – or to apply for a place in a structured doctoral programme.

At present the most common path to a doctorate in Germany involves working under the supervision of a professor. Everyone has to decide for themselves which field of research they want to pursue, and which universities and professors are on their short list. The potential doctoral student then has to apply personally to these university professors. It is important to do so in good time, preferably in person (or in writing) - and you should be well-prepared with information about your previous background and academic performance and your academic goals. "Well-prepared" also means that you should already have a brief synopsis of the doctoral dissertation you are planning to write. Then you have to convince your chosen supervisor to accept you. After all, the relationship between supervisor and doctoral student is supposed to last several years - usually three to five - and involves a lot of work for both sides.

Once you have found a supervisor, the most important step has been taken. The responsible department or the doctoral admissions board must confirm your acceptance as a doctoral student. As a rule you need a certificate from your supervisor, certified qualification documents, and a certificate recognizing that your university certificates make you eligible for doctoral studies. The next step is enrolment for a doctoral degree course. However, you do not have to enrol for doctoral studies in all subject areas. It depends on the respective department's doctoral regulations, which everyone should read through very carefully. They can be found on every department's website. Enrolment as a doctoral student has many advantages – for example, a better status under Aliens Law. Admission to the course of study is a prerequisite. This is usually issued by the registrar's office on submission of your qualifications, the certificate of recognition and - if necessary proof of your language skills. You have to provide evidence of your knowledge of German (DSH or TestDaF examinations) if your dissertation is to be written in German. This is by no means always the case, and it depends upon the respective doctoral degree regulations.

In principle, if you are applying for a place in a structured doctoral programme or at a research training group or graduate school, you will have to take similar steps. In this case, however, the application for the programme takes top priority. The research subject for the planned doctoral dissertation must fit in with the main focus of the programme, and students must have graduated with a "good" or "very good" grade in an examination that is recognized in Germany. The application, which can often be made over the Internet, usually – but not always – proceeds in several stages. First, a



Seven Steps to Becoming a Doctoral Student



What does an application to become a doctoral student need to be successful? An Interview with Professor Sandra Klevansky, Director of the Graduate School of Fundamental Physics at Heidelberg University

Professor Klevansky, what requirements do doctoral students have to meet in Germany – apart from the academic ones?

First and foremost they have to be able to work independently and autonomously. This is important in Germany.

What should an application for acceptance as a doctoral student include in order to be successful? And what mistakes can be avoided in advance?

We expect outstanding grades, a comprehensive application with all the necessary documentation (certificates, transcripts of records, references) – and a clearly formulated interest in the subject. Applicants should not take an unprepared, naïve approach. They should find out how the process in Germany differs from studying for a doctorate in their own country in order to avoid unnecessary surprises – for example, that doctoral students do not only conduct research but may also have to attend courses or give lectures.

www.daad.de/promotion

letter of application – with your CV, first degree thesis, a synopsis of your planned dissertation and the reasons for your application - is submitted to the responsible dean's office or school. You may then be asked to submit a detailed application with a more comprehensive synopsis and at least two references from university teachers. The third stage usually consists of a personal interview. The programme and college websites provide information on the exact procedures. If your application is successful, you will take part in a doctoral programme with seminars and tutorials geared to a doctoral student's needs, and be given individual supervision by a team of university professors. A personal tutor is usually available to help with formalities.

Practical advice

Irrespective of whether you will be studying with a supervisor or in a structured programme, the bureaucracy is the same for everyone. Future doctoral students from non-EU countries need the appropriate visa to enter the country. They should definitely not enter the country on a tourist visa. This cannot be converted later, and you may be forced to return to your home country.

Top of the to-do list on arriving in Germany is registering with the local residents' registration office (Einwohnermeldeamt) or citizens' service centre (Bürgerservice). Everyone has to register there. Furthermore, if you don't come from an EU country, Iceland, Norway or Liechtenstein, you also have to go to the local aliens authority (Ausländeramt) to apply for a residence permit. For this you need proof of your health insurance (you also need this for enrolment, see page 22). You will automatically have health insurance cover if you have a contract of employment. It is also important to look for a place to live early enough. You usually need a certificate of enrolment to get a place in a student hostel. Student services will help with accommodation. Doctoral students also need a current account. You can open one at any bank or savings bank - it is usually free of charge.

A knowledge of the German language is always useful – but not necessarily an absolute prerequisite for doing a doctorate in Germany

Doctoral Regulations

These contain the most important academic and departmental rules governing the doctorate procedure. They cover admission to a doctoral programme, admission conditions (degree qualifications, grades, etc.), regulations on submitting the dissertation and drawing up expert opinions, as well as the details of the oral examination.

DSH

The German Language Examination for University Admission (DSH) consists of a written and an oral exam and is usually free of charge. Some universities charge fees. An alternative is to furnish proof of having passed an examination in your home country according to the TestDaF procedure (www.testdaf.de).

Residence Permit

All doctoral students from non-EU countries or countries outside the European Economic Area require a residence permit. It is issued by the local aliens authority (Ausländeramt), where you can also obtain the application for a residence permit. A residence permit is always limited to a certain time period, but can be extended. The application for renewal must always be submitted before the permit expires.



► www.internationale-studierende.de Comprehensive and very useful information for international students provided by Deutsches Studentenwerk, the student services organization (German, English).

www.research-in-germany.de/faq This central website on research in Germany offers an information brochure "FAQs – Prepare your research stay", which you can download as a PDF file (English).

Costs and Funding Opportunites: Financing a Doctorate

Semester Fees

Everyone who enrols for a course as a doctoral student has to pay special semester fees. (These should not be confused with the tuition fees levied in some states: doctoral students are exempt for the first six semesters!) Depending on the university, enrolment is not always necessary, but we do recommended it. It makes it easier to deal with the authorities - your status as an alien is improved and you can take a part-time job outside the university. Furthermore, enrolled doctoral students are usually entitled to cheaper bus tickets and discount meals in the university canteen (Mensa). Many theatres, museums and cinemas also offer price reductions. The semester fees can cost between 50 and 250 euros, depending on the university and the services that are included.

What does it cost to study for a doctorate in Germany? The good news is that it costs nothing – in principle. No fees are charged for doctoral programmes at state universities and colleges – at least, for the first six semesters. However, you will have to finance your living costs in Germany, and the subject of money already crops up before you enter the country. Prospective doctoral students have to prove that they have enough money to live in Germany when they apply for their visa or residence permit. German authorities expect you to have access to roughly 7,800 euros a year. In some cases, however, they might want proof of a higher amount. The cost of living varies a great deal depending on a person's lifestyle and the university's location - after all, rent alone usually accounts for a third of monthly expenses. And this can vary a lot in Germany.

Students in Germany spend an average of 740 euros on food, clothing, transport, books, health, communications and leisure, according to Deutsches Studentenwerk, the student services organization. In addition to this, students who have enrolled in a doctoral programme have to pay **semester fees**. In the case of doctoral candidates who participate in a structured doctoral programme and do their doctorate at a graduate school, research centre or research training group, the question of funding is usually resolved when their application is accepted: they either work as research assistants or receive a **scholarship** (usually about 1,000 euros a month). However, if you study for a doctorate on the basis of the traditional "apprentice model", you can also apply for a job as a **research assistant** – if the supervisor you choose happens to have a vacancy.

Working as a doctoral assistant

Under this scheme, doctoral students work on their dissertations as research assistants (often part-time) in their professor's department and are paid in line with the regionally agreed salary scale. Depending on the subject and the university, the assistant's tasks usually include collaboration in research and/or teaching and doing administrative work – in addition to completing the dissertation. If the professor runs one of the DFG's many Collaborative Research Centres, it might be possible to work as a research assistant on a DFGfunded research project during the doctoral process. Furthermore, non-university insti-

I can concentrate fully on my dissertation. My doctorate is being funded by a foundation that specifically supports development cooperation in the field of renewable energies. I'm grateful for these very good conditions, because I want to research my subject as thoroughly as possible.

Patricia Chaves, Brazil

The engineer is doing a doctorate at Oldenburg University.



tutions – such as Fraunhofer Institutes – also offer doctoral candidates employment in research projects. Some companies, too, offer and fund doctoral dissertations.

Scholarships for highly qualified Students

These jobs are scarce, however. Better opportunities are offered by the many scholarship programmes, which also support international students. The DAAD offers the most extensive scholarship programme. In 2008 it supported 2,580 international doctoral candidates with individual funding. In addition, the DAAD supports some 2,000 foreign doctoral candidates a year in various projects. In exceptional cases, a full doctoral programme in Germany can be funded for up to four years.

Furthermore, a number of foundations support highly qualified foreign students if they have been approved for the doctoral process (examples include Evangelisches Studienwerk Villigst, Friedrich-Ebert-Stiftung, Friedrich-Naumann-Stiftung, Hans-Böckler-Stiftung, Hanns-Seidel-Stiftung, Heinrich-Böll-Stiftung, Stiftung der deutschen Wirtschaft and Rosa-Luxemburg-Stiftung). Apart from the larger organizations providing scholarships for outstanding students, which are supported by the Federal Government, there are also a number of smaller foundations and scholarship programmes. The DAAD's database (www.funding-guide.de) is a convenient way of researching these programmes.

Private Universities

In Germany, 10 private and 12 churchaffiliated state-recognized universities have the right to confer doctorates. Many church universities do not charge tuition fees. A doctoral programme at a private university can cost several thousand euros a semester.

Everyone else has to finance their studies privately, and that usually means part-time work. There are some restrictions on earning money if you're not a research assistant or a member of the teaching staff. Doctoral candidates from EU and EEA countries have the same status as German students: they are allowed to work for up to 20 hours a week during the semester; there are no restrictions during vacations. If they work longer hours, they risk being regarded as "normal" employees and having to pay higher social-insurance contributions.

Students from non-EU countries are allowed to work for up to 90 full days a year – exceptions apply for academic and student assistants. Student services can provide assistance in looking for a job. You should definitely get permission from the aliens authority (Ausländerbehörde) and/ or the employment agency (Agentur für Arbeit) before starting work. After all, there are exceptions, and these do not just apply to the new EU countries.

What do foundations expect of scholarship-holders? An Interview with Prof. Dr. Hans Fleisch of the Association of German Foundations

Professor Fleisch, do international doctoral students have bigger hurdles to overcome than Germans when they apply for a foundation scholarship? Not in principle. Most foundations that grant doctoral scholarships do not restrict themselves to one nationality.

How can people find the right foundation for a doctoral project?

You won't find all foundations in the scholarship databases. You have to search individually. That is often difficult for foreigners because many foundations have only a German website. But it's worth investing some time here. Supply often exceeds demand, especially in the case of small foundations.

What do the foundations expect of their scholarship-holders?

Foundations want to promote success, so they are looking for an important piece of work that really has an impact, a leverage effect and continues having an influence after the scholarship period. Conversely, foundations do not only offer their students financial support, but also strong networks – and that can be very important "social capital".

www.daad.de/promotion

Scholarships

Many organizations support highly talented international students. As a rule, the prerequisite is an above-average first degree. Different institutions sometimes have additional expectations, e.g. a specific commitment to a social, sociopolitical or religious cause. A scholarship is granted for a limited time, as a rule for two to three years, and students usually have to reapply every year. Organizations that provide scholarships for outstanding students usually also support them with seminars and opportunities to exchange views within an alumni network.

Research Assistant

The ideal situation for (traditional) doctoral students is a dedicated post that accompanies the doctoral process. Academic staff positions are also available in DFG projects. The respective project managers are responsible for filling the posts.



www.academics.com

This portal has Germany's biggest online job market for researchers (German, English).

www.funding-guide.de

The DAAD's scholarship database can be searched by branch of study, country of origin and academic status (German, English, Spanish).

www.euraxess.de

The "funding database" of the Alexander von Humboldt Foundation also includes programmes for visiting researchers (German, English).

www.stipendienlotse.de

This well-structured database can be used to make a detailed, targeted search for current scholarship programmes (German).

Cosmopolitan or Cozy: Living in Germany

Cost of Living

According to a survey by the Deutsches Studentenwerk, an average student in Germany has about 770 euros a month at his or her disposal. Of this, 266 euros is spent on rent, 147 euros on food and 50 euros on clothing. The average student spends 82 euros a month on travel; health insurance costs 54 euros. Telephone, Internet, radio and TV fees add up to 43 euros. Another 35 euros is needed for equipment and study materials such as books. That leaves 62 euros for leisure, culture and sport – so that the monthly costs average 739 euros.

Health Insurance

Everyone must have health insurance in Germany. Proof of health insurance is required both for enrolment at the university and for your residence permit. You can be insured with either a statutory or a private health insurance company. The terms vary, depending on the purpose of residence and your age. Student services have more details on this.

Most weekends, Yang Ji and his wife Hang Zhao can be seen riding around on their bikes. They cycle through the English Garden or to the Olympic Park, stretch out on the grass and enjoy the summer. "Munich is a very beautiful city," says the Chinese computer science graduate, who is studying for his doctorate at the TU Munich. "The people are open, the environment is very international, and everything is very green here." After graduating from the Friedrich Schiller University, Jena, in 2007, Ji had two offers of a doctoral position, one in Munich and one in Stuttgart. He let his newly married wife decide - it wasn't a difficult choice for her. Hang Zhao had first come to Munich as a student in 2001 to take German courses. "I still have many friends here from that time." She subsequently went to Jena to study German as a foreign language.

Main Countries of Origin

China	8.2%
India	7.1%
Poland	5.1%
Russia	4.9%
Italy	3.9%
Greece	3.5%
Romania	3.4%
Austria	3.3%
France	3.0%
Turkey	2.7%
The most common countries of evision of feasing dee	

The most common countries of origin of foreign doc toral students, 2007 (from a total of 3,499 examinations passed), source: Destatis

Moving from the small university town in Thuringia to the Bavarian capital in southern Germany was quite a change for the young couple. "In Jena, it's easy to find an apartment for 200 euros at the most," they explain. "We lived in a student hostel and didn't pay much." But the cost of living varies quite a lot in Germany, and Munich is one of the most expensive cities in the country. The rents are high, and finding a place to live is difficult. "The university's international office helps international doctoral students in their search," says Ji. He himself quickly found a place on his own through an Internet website. The scientist pays 780 euros for

a two-room apartment in the student district of Schwabing. "The owner is a graduate of the TU Munich," Ji says, "so we have something in common."

Yang Ji is employed as a research assistant at the Computation in Engineering Department. There are no fixed working hours. "We come in between nine and ten in the morning and work until six in the evening." The computer scientist spends the early evening with his wife. He then takes care of some organizational work at home, filling in forms or preparing a seminar. "At the beginning there was a minor crisis between us," he says. "I had so many things to do at the same time, and my thoughts were elsewhere in the evenings." It's a major challenge for many scientists to make progress with their own research while assisting with exercises or workshops at the same time. The TU Munich therefore offers targeted training courses for all doctoral students, where they can improve their skills in presentation and personal time management. "These courses have helped me a lot," Ji stresses. "I've learned to set priorities and work my way through one thing after another in a concentrated way."

The atmosphere is very relaxed in his department, he says. "It doesn't matter what country you come from. Everyone is regarded as a colleague." His teammates also have things in common apart from research. They do sport and go hiking in the mountains together. Once a week they cook together with the professor in the institute kitchen. "It's a good opportunity to exchange ideas over lunch and sometimes have a laugh about everyday academic life," says the doctoral student. "For example, about the bureaucracy in Germany," he adds mischievously.

The scientists talk English among themselves and the working group is very international and diverse. "Even so, it's very, very important to learn German," says Yang Ji. He came to Germany eight years ago from north China to study for the German *Abitur* (school-leaving) exam and learn German at a college in Jena. He was



We enjoyed living in Jena. A small town has the advantage that you can settle in more easily. But we also like Munich very much – especially its international flair and the mentality of the people here.

Ji Yang and Hang Zhao, China

The computer scientist is studying for his doctorate at the TU Munich; his wife Hang Zhao is studying in Munich and Jena.

just 19 years old at that time. He tried to speak a lot of German from the beginning. "Most people react very patiently and openly, and they're friendly about helping you – there's no need to have inhibitions."

His wife, Hang Zhao is just about to finish her course of study. She's writing her thesis in Munich and travels to Jena by train every two weeks to keep appointments at the university there. Ji feels it was a great advantage that he spent his first years in Germany in a smaller city where everything was within comfortable reach. "I used to walk the same route from my room to the campus every day; I knew the lady at the bakery and the library staff – it was a bit like a family. You can settle in more easily." In Munich, by contrast, everything is much more international, he says. But the couple like that, too: "I can go out for a Chinese or Thai or Vietnamese meal here. You can find simply everything – even speciality food shops," says Yang Ji.

Furthermore, he is particularly fond of the mentality of people in the Alpine foothills. "I love Munich because the Bavarians have a culture and identity of their own and are so proud of it," says Yang Ji. And, of course, he also appreciates the famous beer. "I think the Oktoberfest is great!"



www.daad.de/aaa

The DAAD's database lists the international offices (Akademische Auslandsämter) at German universities. They can help you with key issues of higher education and everyday life (English, German, Spanish).

www.deutsch-uni.com

This website compiled by the German-asa-foreign-language experts at LMU in Munich makes it easy to find courses for learning German at home on your own computer. Some of the courses are personally supervised by tutors (in six languages).

Commitment and Initiative: What You Need to Feel at Home

Getting Used to Life in Germany

The international offices at universities and research institutes do a lot to make it easier for international doctoral students to settle in. Sightseeing tours, excursions into the surrounding area and language courses all help, especially in the first few months, and enable people to make contacts and gain an impression of their new home. Everywhere, student bodies, international forums and working groups offer an opportunity to engage in academic life. There are also many opportunities for interesting leisure pursuits off campus. This might be a cooking class, a dance club or a subscription to the local gym. The advantage is that you can also get to know people there who have nothing whatsoever to do with research!

I came to Germany after studying mathematics in Istanbul.

That was five years ago. As a DAAD scholarshipholder, I obtained a Master's degree in computer science in Saarbrücken. The city seemed like a paradise to me! So calm, and you could get everywhere you wanted to go in 15 minutes. While I was there, I started courses in ballroom and Latin dancing. That was very good for me because I was the only foreigner there and everybody spoke German. This helped me to get to know many different people and not just students of my own age at the university. I was enthusiastic about the Germans' mentality – their respect, openness and friendliness – and I'm still friends with many of







Pros and Cons: Doing a Doctorate in a Big City

▲ Anyone who likes opera, theatre, exhibitions and big-city bustle in general will love cities like Berlin, Munich, Cologne, Hamburg or Frankfurt.

• Shopping is almost like being home; the cosmopolitan flair of big cities also rubs off on the kind of shops that are available. It's no problem here to find international specialities.

 Large cities usually also have a high concentration of international companies. This is particularly interesting for people who want to do a doctorate in a company or make job contacts at an early stage. • Yet all these advantages have their price. Rents are high, as is the general cost of living. The capital Berlin, of all places, is an exception here: living in Berlin is much cheaper than in other major German cities or comparable European capitals.

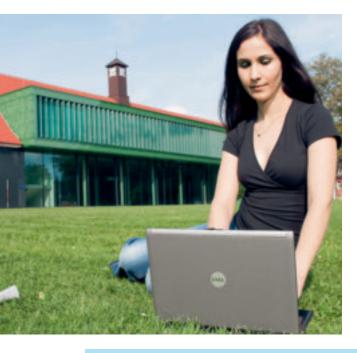
A new language, new surroundings, new job, little free time. Finding your way around as a newcomer in a big city isn't easy.

And you need a lot of luck if you bring your family with you, because crèches and nurseries are completely overrun in many city districts. It can be difficult to find childcare places. them today. My father also studied in Germany. I was actually born here, but grew up in Turkey. I wanted to study here to get to know the country, the people and the culture; I also appreciate the individual freedom in Germany. I was also looking for an opportunity to study at a university with high, international standards. I decided in favour of the private Jacobs University Bremen because of the expertise of my supervisor, Professor Michael Kohlhase, in the field of artificial intelligence, and because the campus is so international: it's exceptional to be among students from 100 countries. I had a scholarship in the first year; now I have a part-time job in a research project. My doctoral dissertation

examines ways of enabling different computer systems to work together in mathematical knowledge management. Apart from the research, I'm involved in the Graduate Students Association. It means a lot to me to be involved in shaping the college life. I live in Bremen-Nord. It's very idyllic there, very green. In my spare time I like to ride my bike or go jogging, and the area is ideal for that. But I never really have much time for it, I'm afraid!

Fulya Horozal, Turkey

The researcher is a PhD student in the Computer Science Department at Jacobs University in Bremen. Everyday life on campus: Fulya Horozal, 27, is studying for her doctorate on knowledge management in computer systems under Professor Michael Kohlhase





Pros and Cons: Doing a Doctorate in a Small Town

 You're more likely to get value for money here. Apartments are cheaper and often easier to find than in big cities. This is a major advantage, especially for families.

 It's often easier to settle in here: everything is much smaller, less complicated, you can find your way around quickly and are soon meeting familiar faces.

• Get on your bike! Being close to nature is one of the great advantages of the more rural towns.

Small towns are quieter, but also more provincial. The range of cultural events is more limited (but the quality isn't necessarily poorer).

There are usually fewer international restaurants and grocery stores.

And although major corporations don't settle exclusively in metropolitan areas, they do tend to be more concentrated there. This is a drawback when you're looking for a potential employer.

Longer travel times to the nearest airport.



www.thesis.de

This interdisciplinary network for doctoral and postdoc students already has about 600 members. They are organized in local and regional networks and also meet for regular get-togethers and events (German).

www.internationale-studierende.de

The Deutsches Studentenwerk website has collected lots of tips for a smooth start to your time in Germany under the heading "On arrival" (German, English).

www.studenten-wg.de

You can use the search function here to look for apartments or rooms in shared apartments throughout Germany (German).

Job Prospects: How Can a Doctorate Help Your Career?

Careers in Higher Education

Since education in Germany is a matter for the Länder, or states, it can be worthwhile to keep an eye on German geography in your career planning: according to calculations by the specialist journal Forschung & Lehre, the remuneration of professors can fluctuate by up to 15% from one state to the next.

Junior Professors

This is an attractive alternative to completing a Habilitation, the German postdoctoral degree that traditionally entitles its holder to become a professor: junior professorships enable outstanding young researchers to teach and research at German universities without Habilitation. There are already some 800 junior professors. In addition to junior professorships, posts are also available for heads of groups of young researchers - for example, under the auspices of the Emmy Noether Programme of the DFG, in the Helmholtz Association and in the Max Planck Society. There are also postdoc researchers who lead groups within one departmental unit. Selection procedures, framework conditions and funding differ very considerably. The jobs with the Helmholtz Association have a tenure track, which offers career security.

A doctoral degree takes a lot of time, a lot of effort and it means waiting several years before you can start your first real job. Whether all this effort is worth it depends both on your subject area and your career plans. A doctorate is a prerequisite for a career in research or higher education, which can, for example, begin with a post as junior professor. Natural scientists will also not get very far in German industry without one. A Dr. med degree is almost obligatory for physicians who want to get off to a good start in their profession and they usually complete the necessary research paper during their university studies.

Yet a doctoral degree is by no means a prerequisite for climbing to the top of the career ladder: the closer a job is to the product or the customer, the less important a doctorate. A doctorate tends to play a rather secondary role in achieving a successful start in sales, marketing or product management, says Dr. Ulrich Langer of the graduate team at the Federal Employment Agency in Düsseldorf. "In these fields, practical skills like eloquence or the ability to handle customers are more important than formal qualifications." Even in the humanities the situation is more complex that it might initially seem. In view of the uncertain prospects on the labour market there are very considerable dangers involved in delaying entry into the world of work. Nevertheless, there are

Top Universities for Doctorates by Foreign Students

University of Heidelberg	6.5%
LMU Munich	5.2%
University of Göttingen	4.2%
TU Munich	3.3%
German universities with the most doctorates by foreigners, 2007 (out of a total of 3,499 passed examinations), source: Destatis	

sectors in which a Dr. phil is a definite advantage – for example, in publishing or in senior library administration. Large law firms and business consultancies also place great emphasis on a doctoral degree. A doctorate does not only document an ability to thoroughly investigate a complex subject. It also looks good on a business card.

Fundamentally, the proportion of senior managers with doctoral degrees is above average in Germany. In certain operational sectors in industry - for example, research and development - applicants with doctorates are preferred. "Without a doctorate I would never have become laboratory manager," explains Dr. Natalia Ragozina. The 31-year-old Russian is responsible for a team of five employees at the Boehringer Ingelheim pharmaceutical company. "At first, of course, taking responsibility for staff is a very new experience for researchers," says the chemist. "As a rule, however, candidates with doctorates immediately start working in a managerial position."



Doctorate wanted: German industry prefers applicants with doctorates in areas like research and development

As a postdoc researcher in Berlin I'll gain even more experience in my subject area. Later I wish to advance my career as a researcher in India. I would then like to initiate interdisciplinary projects with colleagues from India and Germany.

Dr. Jayaseelan Murugaiyan, India

The biochemist completed a doctorate in Leipzig and is now starting postdoc research at the Free University in Berlin.



After studying at the Lomonosov Moscow State University, Natalia Ragozina completed a doctorate in pharmaceutical analysis at the German partner university in Marburg. "The German degree definitely helped me find a job," she says. "It's simply easier for local companies here to assess the quality of the training."

Dr. Jayaseelan Murugaiyan, a biochemist who studied for a doctorate in Leipzig, is also sure his doctoral degree from an internationally recognized German university will make it easier for him to make a name for himself in specialist circles. He is in the process of moving to Berlin, where he has accepted a **postdoc** position at the Free University. "As a member of staff at a German university with a doctoral degree I can develop interesting contacts with other researchers in the biotechnology field," he says. "That's an important basis for later being able to initiate exciting interdisciplinary projects with colleagues from India and Germany. That's my objective."

The vast majority of holders of doctorates believe their doctoral dissertation was a worthwhile investment – and not only as a springboard for their future career. They place a high value on the personal benefit. A survey conducted by Hochschul-Informations-System GmbH (HIS) documents the great significance holders of doctorates attach to the character-building aspect: a dissertation is viewed as a vehicle for personal study and an opportunity to work on an interesting subject. That is an aspect that employers also highly appreciate (see page 29).

Gaining a doctorate has a correspondingly positive impact on a career. The respondents of the HIS survey gained a definite advantage. Above all, doctoral graduates in the natural sciences, medicine and law saw their career prospects improved by a doctorate. Especially the self-employed for example, doctors or lawyers - and economic scientists in commercial occupations found they received greater recognition from customers, clients and business partners. However, a doctorate does not only open doors, it also pays off financially. According to a recent study by Kienbaum Executive Consultants, graduates without a doctorate receive a gross annual salary of 43,500 euros. So-called high potentials with international experience and very good degrees can earn between 45,000 and 50,000 euros. The annual salary for graduates with doctor-

Postdocs

Germany offers a raft of research scholarships for highly qualified international postdoc researchers that open the door for the next step in their research careers. DFG research scholarships enable postdocs of all disciplines to work on their own project in cooperation with a selected research host, for example, for a period of up to two years. In 2008, 355 of these projects were supported. The DAAD also awards postdoc scholarships; applications can be submitted during the final phase of a doctorate. The Alexander von Humboldt Foundation and many other foundations are also good addresses for postdoc researchers who want to realize their own research projects.



My dream is my own research institute that meets European standards. My main concern is not increasing my list of publications. I want to make a difference for my country.

Dr. Damaris Odeny, Kenya

The molecular biologist gained a doctorate at the Center for Development Research (ZEF) and did postdoc research at the Max Planck Institute for Plant Breeding Research in Cologne.

ates or MBAs heads the list at 50,000 to 65,000 euros. Important additional criteria are work placements and knowledge of foreign languages. International graduates who completed a doctorate in Germany are therefore in a very good position. Incidentally, the proportion of **women gaining doctorates** in Germany has very significantly increased in recent years.

"A doctorate from Germany is very highly regarded here in Canada," stresses Canadian molecular biologist Dr. Gabrielle Siegers. She says she learned a great deal at the Freiburg Max Planck Institute of Immunobiology – not only about theory, but also about molecular biology technology. "I had access to everyone and every-

thing I needed to pursue my project," the scientist explains. "I spent a month in Spain within the framework of a research partnership." After gaining her doctorate in early 2007, the biologist returned to Toronto as a postdoc researcher and now works at the Ontario Cancer Institute. As a DAAD Research Ambassador, she now shares her positive experiences of Germany with other Canadian students and researchers who are interested in doing a doctorate or research in Germany. "As a contact person, I inform people about Germany as a centre for research and establish contacts with researchers." It is not uncommon for alumni like Gabrielle Siegers to ensure that the circle of international doctoral students in Germany continues to grow.

Proportion of Women Doctoral Candidates

Roughly 10,000 doctoral degrees were gained by women in Germany in 2007. According to figures published by the Federal Statistical Office, the proportion of women among all successful doctoral candidates rose to 42% (2000: 34%). However, women are still underrepresented in research and teaching: their share of research and artistic staff at German higher education institutions was one-third in 2007.

DAAD Research Ambassadors

The Research Ambassador Programme was initiated by the DAAD Office in New York. Seventeen research ambassadors have been chosen to communicate their experiences of research in Germany to students and researchers in the USA and Canada in 2009/2010. More details are available at www.daad.org

How can a doctorate help your career? An interview with Dr. Tiemo Kracht, Managing Director at Kienbaum Executive Consultants

Dr. Kracht, how important is a doctorate for professional success?

A doctoral degree continues to have considerable status because it reflects a high standard of achievement. If you study for a doctorate, you demonstrate a strong interest in keeping up with the times and understanding complex subject matter. That also indicates a healthy sense of ambition. Additionally, doctoral students develop a network within the world of research that is of interest to companies.

In which areas is a doctorate a precondition for getting ahead?

In all research-oriented disciplines – for example, pharmacy, information technology and engineering – senior positions are only filled with researchers with doctorates. In other sectors – for example, banking, in large law firms or in business consultancies – a doctorate is not a requirement, but employers do very much look for one.

Does that also have an effect on starting salaries?

The gap between high potentials with and without doctorates is somewhere between 10 and 20%. That's because researchers who have already spent three or four years working at a university and taught as lecturers can offer valuable professional and life experience. Beginners with a doctorate have a special status in business consulting. They tend to be assigned to broader subjects and very quickly assume full responsibility for discrete project areas.

Can it be said that the smaller and more practice-oriented the business, the less important a doctorate is?

There are sectors in which a doctoral degree would tend to have only a decorative function. For example, a family business that is looking for someone with practical experience. But it depends on the industry. In mechanical and plant engineering, for example, even small companies need highly qualified experts.

International qualifications like the MBA are becoming increasingly popular. Is the Master's superseding the doctorate?

An MBA is now considered equivalent to the training as a *Diplomkaufmann* in Germany and it represents an interesting option for companies that want to integrate staff at an earlier age. That doesn't rule out a doctorate, which can also be completed part-time outside work. The doctoral title retains its significance – especially against the background of the current economic and financial crisis.

What do you mean by that?

Character deficits also led to this economic imbalance. Many top-class CVs that were presented were just facades. That has led to personality now being more highly rated than formal education. And the process of gaining a doctorate is an important aspect here. Doctoral students are not obsessed with titles and status. It's all about the challenge of getting to grips with complex subject matter. That represents a value in itself.

How are doctorates "made in Germany" regarded internationally?

Germany has an outstanding reputation as a business location. When I look at the top group of German institutions of higher education, they can match worldclass universities in any international comparison. In any event, it is definitely an advantage for international students to do a doctorate in Germany – the more international the programme, the better. In an international environment up-andcoming researchers develop a global network that improves their ability to act in management. Collaborations between universities and businesses are also attractive. Structures in this area are changing considerably. A doctorate from an institute that cooperates with SAP or Siemens, for example, has an extremely high status. 🎽 Links

www.academics.com

Focusing on "Your Career in Research and Higher Education", this website is the place to look for vacancies at universities and research institutions. Academics offers the largest online job market for professors, junior professors, research assistants, researchers and lecturers in Germany (German, English).

www.fazjob.net

Large numbers of management jobs are advertised in the renowned daily Frankfurter Allgemeine Zeitung. They also include interesting vacancies for researchers. In addition, you will find useful tips and information about applications, careers, the world of work and employment (German).

www.unilife.de

The student portal of the AOK health insurance fund offers information for graduates under the heading "Job und Karriere" (German).

www.findapostdoc.com

FindAPostDoc lists international postdoc positions and offers several forums for doctoral and postdoctoral researchers (English).

More Information about Earning a Doctorate in Germany

A doctoral dissertation needs to be well prepared – especially if you plan to write it abroad. The Web addresses on these pages provide the most important information about doing a doctorate and living in Germany. No matter how exhaustive the information on the Web is, however, the best way to get to know Germany and the German research landscape remains a personal visit: for example, during one of the many summer courses at German universities especially for international students.



Preparation & Overview

www.daad.de

The website of the German Academic Exchange Service (DAAD) is the first place to look for reliable and comprehensive information about studying and completing a doctorate in Germany. It also offers a large number of links to useful databases and other resources. Staff at the 14 DAAD offices and 50 DAAD information centres worldwide as well as the many teachers and lecturers sent by the DAAD to international institutions of higher education are also willing to provide help in person (over 20 languages).

www.daad.de/promotion

This section of the DAAD website is aimed specifically at international doctoral students and offers crossmedia information that complements this magazine with additional texts and in-depth interviews on this subject (German, English, Spanish).

www.research-in-germany.de/faq

This link takes you to an informative list of "FAQs – Prepare your research stay in Germany", which is aimed at visiting researchers and contains a lot of useful information for a trip to Germany. An FAQ about doing a doctorate will become available at the end of 2009. The website offers many insights into Germany as a centre of research (English).

www.hochschulkompass.de

The database allows you to search for doctoral study opportunities by university, subject and discipline, admittance criteria and region. However, not all doctoral programmes are listed in the database (German, English).

www.auswaertiges-amt.de

Important information about visas as well as the relevant application forms are available here under > Welcome to Germany > Coming to or staying in Germany. German foreign missions also provide help on questions about entering the country (German, English, French, Spanish, Arabic).

Life & Accommodation

www.germany-tourism.de

The website of the German National Tourist Board presents lots of useful information on travel, leisure and excursions. An event database helps visitors find interesting things to do.

www.young-germany.de

This website is aimed at a young international target group with an interest in Germany. Research is a regular topic and the site also offers a lot of tips about finding jobs and accommodation (English).



www.daad.de/sommerkurse

The database assists in finding the right summer course at a German university – the ideal opportunity to get to know Germany and its higher education system. Courses cover subjects ranging from German-asa-foreign-language to engineering. Most of these courses, which are especially designed for international students, take place between June and September. However, there are also some programmes available in winter (German, English).

www.academics.com

This website, which is run by the weekly newspaper Die Zeit and higher education journal Forschung & Lehre offers information on doing a doctorate in Germany as well as an up-to-date overview of vacancies for doctoral students at German universities (German, English).

www.facts-about-germany.de

"Facts about Germany" provides background information on all aspects of life in Germany. An entire chapter is devoted to education and research (in 17 languages).

www.magazine-deutschland.de

The website of Deutschland magazine offers reports, articles and background information about topical themes in German politics, culture and science (in 10 languages).

www.studenten-wg.de

An Internet accommodation exchange enables students to look for apartments and rooms in shared apartments nationwide free of charge (German).

Language & Examinations

www.deutsch-lernen.net

The DAAD offers a great deal of information about where and how to learn German. It also answers FAQs (German, English, Spanish).

www.goethe.de

The website of the Goethe-Institut, Germany's globally operating cultural institution, combines information and links on German courses and examinations with sections covering the arts, society and knowledge (German, English).

Networks & Communities

www.kisswin.de

Kisswin.de, the platform for researchers of tomorrow, is aimed at undergraduate and doctoral students as well as everyone interested in a research career in Germany. The website is funded by the Federal Ministry of Education and Research (BMBF) and offers information on academic career paths, workshops, networks and forums as well as news and events and its own database of funding organizations (German, English).

www.thesis.de

The interdisciplinary network for doctoral and postdoc researchers has more than 600 members, who are organized in local and regional networks. They also meet on a regular basis or for specific events. There are various project groups on subjects such as higher education policy, international issues and transdisciplinary research. Thesis represents Germany in Eurodoc, the European federation of national associations of doctoral candidates in Europe (German).

www.eurodoc.net

Eurodoc is a Europe-wide association of doctoral students and young researchers that aims to represent their interests at the European level. Eurodoc also seeks to advance the quality of doctoral programmes

Education & Research

www.euraxess.de

The Alexander von Humboldt Foundation's information platform for international researchers also offers doctoral students interesting tips and advice about living and researching in Germany, a scholarship database, a Europe-wide job exchange and a large number of links to other interesting sites (German, English).

www.scilife.net

SciLife aims to improve networking between researchers. Members can create their own profile, add contacts, form groups and join existing ones (English).

www.bildungsserver.de

The German Education Server sees itself as an online guide to education-related information and resources. It is a meta-server facilitating access to information about the German education system provided by the Federal Government and the Länder, the European Union, universities, schools, research institutions, documentation centres and museums (German, English).

www.forschungsportal.net

The search engine of the Federal Ministry of Education and Research (BMBF) combs the Internet servers of publicly funded institutions, such as colleges and universities, and non-university research establishments for research results and doctoral dissertations (German, English).

Foundations & Scholarships

www.funding-guide.de

The DAAD's scholarship database enables graduates to find appropriate funding opportunities on the basis of subject and country criteria (German, English, Spanish).



and promote cooperation between national associations of junior researchers. Its website offers news and information and publishes details of events and the reports of various work groups. (English).

blog.scholarz.net

Everything on the communication platform for junior researchers revolves around the subject of doing a doctorate as well as experiences and insights gained while writing a doctoral dissertation (German, English).

www.dab-ev.org

The website of the German Federation of University Women is specifically aimed at female researchers and also offers contacts to regional networks (German).

www.stipendiumplus.de

This website presents the 11 organizations funded by the Federal Ministry of Education and Research (BMBF) to foster young talent as well as their common goals and the criteria for and content of their support programmes. It offers an overview of the various programmes and naturally also provides links to the individual organizations (German).

www.stipendienlotse.de

The "scholarship pilot" is a new and very clearly structured easy-touse scholarship database of the Federal Ministry of Education and Research (BMBF). Doctoral students can find detailed information about current scholarship programmes on the basis of various parameters (German).

"If you want to turn your visions into reality, come and study in Germany."

Ernesto Kuchen from Argentina is doing a doctorate in architecture at the Technische Universität Braunschweig.

Picture taken in front of the phæno science centre in Wolfsburg. The building was designed by Zaha Hadid, winner of the Pritzker Prize.

> Study in Germany Land of Ideas

www.study-in.de