

The German doctorate A guide for doctoral candidates









•••••

WELCOME

Thank you for looking in! We would like to introduce you to Germany as a host country and show you how you can successfully study for a doctorate here and create new prospects for your future. Many young international researchers are already pursuing this path. Roughly 27,000 graduates complete a doctorate in Germany every year – far more than in any other European country. Approximately 4,000 of them come from abroad. Above all, international doctoral candidates appreciate the great diversity of the German research landscape: alongside world-class universities, prestigious research institutions also offer opportunities to study for a doctorate. With their proximity to industrial practice and swifter career entry, companies also offer many advantages on the path to a doctorate.

If you study for a doctorate in Germany, you will conduct serious research of the highest standard. Doctoral candidates investigate a specific question in great depth and contribute to new insights in their field. In the process they enrich human knowledge and lay the foundation for a career in research. Nevertheless, a doctorate can also help you to develop a career outside the world of science or scholarship. Many companies appreciate the specialist knowledge of holders of a doctoral degree and their ability to work in an independent manner.

This brochure outlines the different paths to a doctorate, provides practical advice and presents background information in a concise and understandable way. This guide uses the terms "doctoral candidates" and "doctoral students" interchangeably for prospective and current doctoral candidates who are studying for, or thinking about studying for, a doctorate. Germany is a land of education and research that presents a multitude of opportunities – we can help you grasp them.

•••••





1.	WHY COMPLETE A DOCTORATE IN GERMANYS The advantages of the German research landscape and the international reputation of a German doctorate	6
2.	PATHS TO A DOCTORATE The different routes to a doctorate in Germany and which approach is best for which student	10
3.	BEFORE YOU START Finding the right supervisor or programme and making a successful application	16
4.	SUPPORT AND FUNDING The cost of a doctorate and living in Germany and where doctoral candidates can receive support	28
5.	LIVABLE GERMANY Leisure and recreation opportunities and making a good start	34
	Imprint	39



1. Why complete a doctorate in Germany?

Only universities and higher education institutions of equal status have the right to award doctorates. Some German states are planning to grant universities of applied sciences (Fachhochschulen, FHs) the right to award doctorates independently subject to specific criteria.

The Excellence Initiative is a government funding programme that was launched in 2005 to support outstanding research at German higher education institutions. Its total value is 4.6 billion euros. In all, 45 graduate schools, 43 excellence clusters and 11 institutional strategies at 44 universities will receive support until 2017.

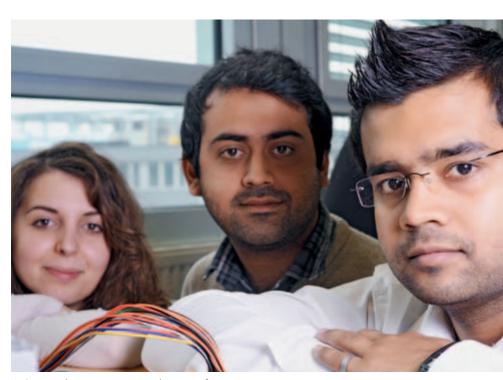
Germany is the ideal place to study and do research. Not only do education and science enjoy a very high status here, but Germany also offers an outstanding research infrastructure. Over 140 higher education institutions – not only in big cities like Berlin and Munich, but also in smaller towns like Greifswald, Weingarten and Clausthal-Zellerfeld – have the right to award doctorates. The subjects on offer range from agricultural science to zoology. Some 700 departments allow students to write their doctoral theses in English, while students at more than 260 departments can also use other foreign languages.

There are tradition-steeped institutions like Heidelberg University, which was founded in 1386, and very large ones like RWTH Aachen University, which has over 40.000 students. Both these institutions are among the 44 universities that receive special funding as part of the Excellence Initiative and they were also distinguished by the initiative for their institutional strategies. Alongside these big names there are small, specialised private universities, such as the Bucerius Law School in Hamburg. Germany also has some 225 universities of applied sciences (Fachhochschulen), which are more oriented to the practical application of knowledge. Although they do not have the right to award doctorates themselves, they often work closely with other universities to enable their graduates to study for doctorates. However, universities are not the only institutions that conduct first-class research in Germany. Doctoral candidates can also work at one of the numerous non-university research institutions that form an important pillar of German research. These include such prestigious organisations as the Fraunhofer-Gesellschaft, the Helmholtz Association, the Leibniz Association and the Max Planck Society. International graduates are also very welcome in industry. Many companies offer outstanding opportunities for young researchers.

A doctorate from Germany has many advantages. It documents a globally accredited and recognised academic training and certifies profound specialist knowledge and experience of independent research. A German doctorate does not only identify its holder as a scholar who has successfully carried out his or her own research; it also opens up opportunities for an international career.







A German doctorate opens a wide range of career opportunities.

The Lisbon Recognition Convention, or the Convention on the Recognition of Qualifications concerning Higher Education in the European Region to use its full name, is an international legal agreement that was developed by the Council of Europe and UNESCO. It envisages easier mutual recognition of foreign study credits and qualifications.

DID YOU KNOW ...

... that 96% of international students come to Germany because of the quality of teaching?

... that state higher education institutions do not charge tuition ees for doctoral study?

... that the Better Life
Index ranks Germany
among the Top Ten
OECD countries in
terms of income, education, environment
and work-life bal-

WILL MY GERMAN DOCTORATE BE RECOGNISED INTERNATIONALLY



Germany is at the top of the international league table when it comes to training junior researchers: more doctorates are only awarded every year in the USA, and the proportion of doctorates is only higher in Switzerland and Sweden. The formal recognition of German academic training abroad – or of foreign academic qualifications and degrees in Germany - is governed by the Lisbon Recognition Convention, which has currently been ratified by 53 countries. There are also a number of bilateral agreements. Germany has come to arrangements of this kind with 15 additional countries. It has not yet been possible to conclude a general agreement with English-speaking countries, but individual partnerships have been built with specific institutions. Experience shows, however, that German doctorates are also highly regarded by researchers in the USA, for example. They know that a German doctorate involves independent research achievement, and they appreciate



the professionality and the pragmatic and committed work approach of researchers who completed their doctorates in Germany. However, there can be considerable differences in the official recognition procedures in countries that do not have agreements with Germany. The academic recognition of German higher education qualifications abroad is then mainly the responsibility of the respective higher education institution.

Many countries have national information centres for the recognition of foreign academic qualifications. You can find out about them, for example, on the European website at www.enic-naric.net. The agency responsible for evaluating foreign qualifications in Germany is the Zentralstelle für ausländisches Bildungswesen (ZAB): www.kmk.org/zab (only in German).

LINKS

You can find additional information about the research landscape in Germany, career opportunities and scholarships as well as the latest news on higher education and research at

www.research-in-germany.org

The Young Germany website presents information about research in Germany, provides help with career planning and offers useful advice on living in Germany: www.young-germany.de

The focus on independent development of ideas is very strong in German universities. My postdoctoral advisors in the USA are often impressed with my efficiency and fearless manner in which I take on new challenges and projects. Colleagues meet me with respect as well." Inarid Jordon-Thaden

is a research botanist at the University of California, Berkeley, and a postdoc at Bucknell University, Pennsylvania.

A doctoral degree entails independent research.



2. Paths to a doctorate

A doctorate is the highest academic degree that a university can award. In Germany, studying for a doctorate primarily means working intensely on a specific subject or research project for a long period of time. How closely doctoral candidates are supported by the university or research institution and how much independence they have in their work depends on the path they have chosen. The length of time a doctorate takes also varies. Depending on the path taken, the duration of study is influenced by the student's personal time plan, the way a doctoral programme is organised or the fixed term of a research job. Three to five years are normal.

STRUCTURED OR TRADITIONAL?

If you decide to do a doctorate, you can choose between different forms of study. Depending on your discipline, research area, personal circumstances and formal qualifications, there are various routes to a doctorate. Fundamentally, there are two different paths. On the one hand, there is the traditional approach, sometimes called the individual doctorate, which is based on independent research carried out alone under the supervision of one professor. This is the path taken by most doctoral students in Germany. However, the second path, the structured doctoral programme, is becoming increasingly popular. The structured model is more closely based on the doctoral degree programmes found in Englishspeaking countries. There are good arguments in favour of both routes. Below we will outline the requirements associated with each of these paths and help you to discover which model suits you better.

TRADITIONAL APPROACH

The traditional individual model is the most common route to a doctorate in Germany. Here, doctoral candidates are guided by a supervisor (Doktorvater/Doktormutter). Although they conduct research on their subject in



DID YOU KNOW ... 8

... that roughly
one third of doctorates in Germany
are carried out in collaboration with
non-university
research institutions?

... that more than one quarter of doctoral candidates in Germany receive public fundina?

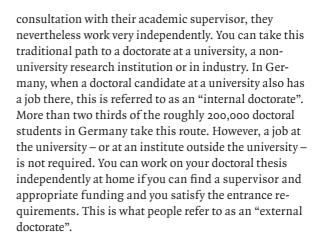
... that the highest proportion of doctors students in Germany - roughly 29% write their doctoral thesis in the field of mathematics and natural sciences?

The student's doctoral thesis is supervised by a professor. Because this involves intense academic exchange, in Germany supervisors are usually known as Doktorvater/Doktormutter (literally, doctor father/mother).

......



Many doctoral students also have a job at their university.



A special form of individual doctorate involves research in industry. In this case, doctoral students usually write their thesis in collaboration with the company where they are employed. In particular, companies in research-intensive sectors, such as the automotive industry, cooperate with universities and offer doctoral candidates work contracts and support on their way to a doctorate.



This model links work experience with applied research in the closest possible way. The subject of the doctoral thesis must suit the company. Nevertheless, you still need a supervisor who is entitled to award doctorates. Ideally, the prospective doctoral candidate has already found a supervising professor. However, some companies also help junior researchers find an appropriate supervisor.

Applied research partnerships between universities and industry also enable individuals to work on a project and complete a doctorate on the basis of their findings. One example of this model is the INI.TUM research centre, a collaborative partnership between Audi AG, the City of Ingolstadt and Technische Universität München (TUM). In this case, doctoral students are employed by the university and work on a doctoral project in consultation with their supervisors at the university and within the company.

Non-university research establishments such as Fraunhofer Institutes also offer opportunities to complete a doctorate in industry-related or application-oriented research projects organised in cooperation with universities. In this case, doctoral students work as institute employees on joint research projects with industry partners. The doctoral work is supervised by a professor at a partner institution. This kind of doctorate facilitates research in a realistic setting and offers opportunities to combine employment with research and gain additional practical experience.

STRUCTURED DOCTORAL PROGRAMMES

In addition to the traditional individual path, a doctorate can also be completed in Germany as part of a structured programme. These programmes offer a form of training similar to that found in English-speaking countries. Here, a team of supervisors guide their doctoral candidates. These programmes include a supporting curriculum, are often organised in an interdisciplinary way and usually provide opportunities



As the member of a graduate school, I am often given the chance to present and discuss my work with other researchers from multiple disciplines – a great way to get feedback and to keep on track with my project's goals."

Leone Rossetti from Italy is a doctoral candidate in biophysics at the International Graduate School of Science and Engineering (IGSSE) at Technische Universität München (TUM).

to acquire soft skills and additional qualifications. The systematic and intensive support these programmes offer often makes it possible to complete a doctorate within three years.

Approximately 8% of doctoral candidates in Germany are currently participating in structured programmes of this kind – and their numbers are growing. This option is primarily available in over 200 research training groups

WHAT KIND OF DOCTORATE SUITS ME BEST? THE DIFFERENCES AT A GLANCE

	TRADITIONAL APPROACH	STRUCTURED PROGRAMME
Selecting a research project	I would like to choose my own doctoral subject. I would like to study for my doctorate with a specific researcher.	l prefer thematic integration in a doctoral or research programme.
Organisation	I enjoy working independently and taking responsibility for my work. I would like to plan how I use my time myself. I would like to primarily concentrate on my research topic. I will attend selected subject seminars, if necessary.	I would like to regularly exchange ideas with colleagues. I would prefer to be integrated in a specific project or have a fixed curriculum. I would like my doctoral study to have a definite timeframe. I would like to receive support with articles, lectures or participation in conferences. I would like to deepen my subject knowledge and key skills in seminars.
Supervision	I would prefer in-depth discussions with one supervisor. I want to find a supervisor according to my own criteria.	I would like to have several contact partners. I would like to receive support with official formalities such as registration and a work permit.

(Graduiertenkollegs) funded by the German Research Foundation (DFG) and the 45 graduate schools (Graduiertenschulen) supported by the Excellence Initiative. In addition, the German states support structured doctoral programmes at individual higher education institutions. Non-university research organisations also offer structured doctoral programmes, which are usually interdisciplinary in nature. For example, the Max Planck Society runs its own research schools, while the Helmholtz Association maintains research schools and graduate schools, and the Leibniz Association has its own graduate schools.

Structured doctoral programmes are particularly attractive for international doctoral students. They are often internationally oriented and use English as the language of instruction or working language. Some programmes – for example, the Helmholtz Association's international doctoral programmes – are explicitly aimed at international doctoral students. Half of the doctoral candidates at Max Planck Society research schools already come from outside Germany.

There are now a large number of structured doctoral programmes available. In Chapter 3 you can discover how to find the programme that best suits your expectations and qualifications.

LINKS

You can find detailed information on studying for a doctorate in Germany at the Research in Germany website: www.research-in-germany.org/phd

Research training groups

(Graduiertenkollegs) are now found at many higher education institutions. They offer a structured doctoral programme and enable doctoral students to qualify in one thematic area within the framework of a focused research programme. Most research training groups are interdisciplinary in nature.

Structured support is also available at the graduate schools (Graduiertenschulen) that have been established within the Excellence Initiative framework to promote the subject focus of the respective location in a targeted way. Compared to research training groups, these graduate schools are larger networks that have a broader thematic scope and seek answers to overarching questions.

.....





3. Before you start

DOCTORATE - YES OR NO?

As well as opening up many opportunities, a doctorate also involves considerable challenges. Everyone must carefully consider the advantages and disadvantages before deciding to study for a doctorate. One of the most important questions is that of personal aptitude. You need dedication, discipline and energy to master a doctorate. That applies particularly to the traditional individual doctorate, which requires a large degree of independence. Doctoral candidates must be able to organise their own work and constantly motivate themselves to continue the project – even during the most difficult phases.

The following statements should help you determine whether a doctorate is the right thing for you. Anyone who wants to do a doctorate ought to be able to agree with most of these statements:

- Doing research is fun.
- I enjoy becoming absorbed in a specific subject.
- I am prepared to concentrate on a doctoral thesis for three to five years.
- I am capable of laying down work plans for myself and consistently adhering to them.
- I have no problem with working on my own.
- I know I can overcome periods of low motivation.
- I can well imagine working in research at some point in the future.

Independence and resilience are important because a doctoral student has to plan, structure and write an extensive research paper. This doctoral thesis or dissertation is at the heart of the doctorate. It is meant to demonstrate the candidate's ability to engage in profound, independent aca-

The doctoral thesis or dissertation (Doktorarbeit or Dissertation) is a research treatise that the doctoral candidate submits for the award of a doctorate.

.....



The doctoral degree regulations (Promotionsordnung) contain the most important rules for the examination procedure. These include the prerequisites for admission as well as rules governing the submission of the thesis, the preparation of the appraisal and the oral examination.

The Rigorosum is a usually nonpublic oral examination of the applicant's academic qualification. The doctoral thesis is not the only subject of the examination; the candidate's knowledge of other relevant areas of the respective discipline is also scrutinised.

The Disputation is an academic "debate". The candidate presents his or her doctoral thesis and defends his or her ideas before the members of the board of examiners and assessors.

......

demic analysis and to contribute to an advance in general academic knowledge.

Above and beyond this, the doctoral thesis must satisfy specific formal criteria as laid down in the doctoral degree regulations (Promotionsordnung) of the respective department. In addition to the written thesis, the award of a doctorate also entails an oral examination known as the Rigorosum or Disputation. The publication of the thesis completes the doctoral degree process. Generally, the doctoral certificate is only awarded to the candidate after the thesis has been made available to an academic audience. With the doctoral certificate comes the right to bear the doctoral title. Departmental doctoral degree regulations can usually be found on the website of the respective university or with the aid of the database offered by the German Rectors' Conference at www.higher-education-compass.de.

Almost half of all departments allow students to gain a doctorate "cumulatively" with a series of publications. Particularly in the natural sciences and medicine, it makes sense for researchers to publish several papers in prestigious journals rather than one extensive monograph. Usually, however, the requirements are very strict: not all publications in all journals are recognised for this purpose. The conditions are defined in the regulations of the respective department.

FORMAL REQUIREMENTS

Once you have taken the fundamental decision to do a doctorate, you should find out which requirements you need to meet. In addition to motivation, self-initiative and dedication, there are a number of formal qualifications.

GOOD DEGREE

The most important prerequisite for a doctorate is a very good higher education qualification that is recognised in Germany. As a rule, this is a qualification equivalent to a master's degree awarded after at least eight semesters of



study. In exceptional cases, especially qualified applicants with a bachelor's degree or graduates of universities of applied sciences (Fachhochschulen) can also be admitted as doctoral candidates (fast-track programmes). Depending on the German state and doctoral degree regulations involved, the respective department can also require an additional admission examination or evidence of specific study or examination achievements.

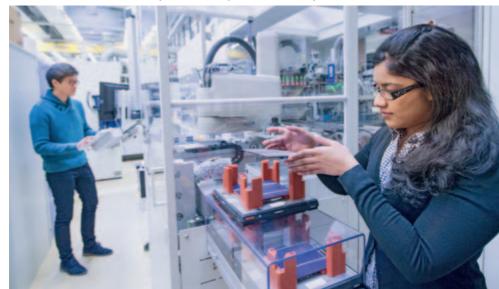
Decisions on admissions of doctoral students and the recognition of earlier periods of study lie solely with the individual German higher education institution. Prospective doctoral candidates must submit an application for the recognition of their higher education qualifications to the Dean's Office (Dekanat) or the Board of Examiners (Promotionsausschuss) at the respective department. In some cases, the admittance of international doctoral students is subject to an additional examination. This is intended to show whether the applicant's knowledge is of the same standard as a comparable German higher education qualification.

The Dean's Office (Dekanat) administers the department of a university. It is the point of contact for doctoral students with regard to registration for the examination.

The Board of Examiners (Promotionsausschuss) normally consists of several professors and members of academic staff of the department in addition to the dean. This body is responsible for doctoral degree matters.

•••••••

Doctoral candidates have to clarify a number of questions before they can start.

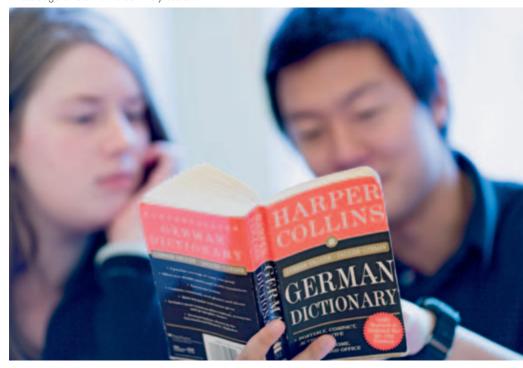


Candidates must prove knowledge of German with officially recognised qualifications.
These include the DSH examination (Deutsche Sprachprüfung für den Hochschulzugang), which can only be taken in Germany, as well as Goethe-Institut examinations and TestDaF (Test of German as a foreign language).

GERMAN - A "MUST"?

It goes without saying that being able to speak the host country's language is extremely useful. Often, however, doctoral students can also write their thesis in English. Information on this subject is provided in the respective doctoral degree regulations, which are generally available on the website of the respective department. If the thesis has to be written in the German language, however, the applicant may be required to produce proof of appropriate knowledge of German. Whether evidence of appropriate knowledge of English is required when a thesis is written in English can vary from university to university and department to department. Here, too, the relevant regulations will provide further information.

Knowledge of German is definitely useful.



THE FIRST STEPS AT A GLANCE

Anyone who is planning to complete a doctorate should clarify the following questions directly with their chosen university:

- Is my higher education qualification recognised in Germany?
- Must I pass a recognition examination?
- Must I provide proof of my knowledge of the German language?
- Are further entrance requirements listed in the doctoral degree regulations?
- The doctoral degree regulations list the other requirements for the examination process. You can also receive information from the professors who are responsible for a particular subject. Letters of recommendation from your own university teachers can be useful and are occasionally even required.

ENROLMENT RECOMMENDED

Although it is not absolutely necessary, it can be advantageous for international doctoral students to enrol for a doctoral programme even if they are taking the traditional individual path to a doctorate. The prerequisite for this is admission to study (Zulassung zum Studium) at the university. For this purpose, the university may possibly require proof of a successfully completed German examination. This can even be the case when the doctoral candidate is writing a thesis in English. Advice on this subject is available from university international departments. Doctoral degree regulations on departmental websites also provide information on admission requirements.

At some universities the timeframe for a doctorate is limited to three to five years.

The most important step comes after these formal points have been dealt with: finding the right supervisor or the right doctoral programme.



The decision on admission to study (Zulassung zum Studium) is taken by the responsible body at the higher education institution on the basis of the current study and/or doctoral degree regulations. Universities' doctoral degree regulations can be found on their respective websites or using the database offered by the German Rectors' Conference.

The path towards a doctorate begins with an application.

TTIPS FOR YOUR APPLICATION

Invest a lot of time and work in your search for the right programme or the right supervisor.

Choose your thesis topic in a way that fits in with the programme or the academic orientation of your supervisor. Graduate schools are more broadly based in terms of subject matter and work in an interdisciplinary way. Nevertheless, your thesis must fit in with their specific fields of research.

Make your motivation clear! It is important to clearly show where your interest lies in your very first contact

•••••

Show that you are wellinformed: you know the requirements for a doctorate in Germany.

Demonstrate your interest: you know the doctoral programme or the potential supervisor's research field and you know what to expect.



HOW CAN I FIND A SUPERVISOR

Finding a suitable doctoral degree supervisor is no simple matter. You should certainly invest enough time and energy in your search, since this professor will be an important person in your life for several years. A first step can be a search for a suitable university institute or non-university research institution. Many of the supervisors at research centres are also employed at universities and have the right to award doctorates. Helpful online databases include the Research Explorer, which contains details of over 22,000 research institutes, and PhDGermany, the DAAD search platform that lists doctoral programmes especially for international doctoral candidates. You can also find out which higher education institutions might come into question with the Higher Education Compass offered by the German Rectors' Conference. This database usually presents various links on departments including contact details, doctoral study regulations and information about international cooperation programmes or research projects.



SEVEN STEPS TO BECOMING A DOCTORAL CANDIDATE

- 1. Outstanding degree
- 2. Have your degree recognised in Germany
- 3. Find a supervisor or apply to a doctoral programme/graduate school
- 4. If necessary, apply for admission to study at university
- 5. If necessary, enrol as doctoral student
- 6. If necessary, apply for acceptance as doctoral candidate in department
- If necessary, apply for admission to doctoral degree examination process (at some universities this is only required later)

NOTE: The respective doctoral degree regulations state whether it is necessary to enrol at the university and when applications have to be submitted for acceptance as a doctoral student and admission to the examination process.

Your own professor's or university's contacts with an appropriate department or a specific professor can also be helpful.

MAKING CONTACT

When you think you have found a potential supervisor, you have to present your research proposal and submit an application. Applicants should inform the professor about the subject they studied, the university at which they studied and the grades they achieved. Other important details are the subject of the undergraduate dissertation or special assignment and the research area in which the applicant would like to specialise. If possible, applicants should also present a carefully thought-out outline of their doctoral thesis. It should provide a detailed and understandable description of the research project and explain how it can be realised. Applicants should also outline the significance of the topic and the current state of research. The research proposal should also include a time schedule and a bibliography with relevant literature.





After the initial contact by email I sent my supervisor my exposé. I had to rework it a little, but eventually I was successful."

Jaime Báez León from Colombia is doing a doctorate at Freie Universität Berlin on the history of literary criticism in Latin America. If the supervisor accepts the applicant, the appropriate department or board of examiners must confirm the acceptance of the doctoral student. At some universities, doctoral students must already apply for admission to the doctoral degree examination process at this stage.

At some universities, enrolment deadlines also have to be met by students who are completing a traditional individual doctorate. Information is usually available on the university website.

HOW CAN I FIND THE RIGHT DOCTORAL PROGRAMME

In the meantime there are a large number of doctoral programmes in Germany. They are offered as doctoral study programmes by one or more cooperating higher education institutions – for example, as the (international) research training groups funded by the German Research Foundation (DFG), as graduate schools funded by the Excellence Initiative or as doctoral programmes of non-university research institutes.

These programmes differ not only in their subject specialisation – some are closely tailored to the needs of specific

So much choice: the range of opportunities for doing a doctorate is enormous.





VISA REQUIREMENTS AND ENTERING GERMANY

European students can normally study and work in Germany without any special permits. If you do not come from a member country of the European Economic Area (EEA) or Switzerland, however, you will require an appropriate visa. A tourist visa is not sufficient. Citizens of the USA and a number of other countries are allowed to apply for a residence permit after entering the country. It is important to apply for a visa in good time because it can take several weeks to process your application.

After arriving in Germany, newcomers need to pay a visit to the Registration Office/Citizens' Service (Einwohnermeldeamt/Bürgerservice). Citizens of EU and EEA countries also have to register here with the local authorities. International doctoral students from countries that do not belong to the EEA must also apply for a residence permit at the local Aliens' Authority (Ausländeramt). A residence permit is always temporary and only valid for a limited period. It is absolutely essential to apply for an extension before the permit expires.

research projects, for example, while graduate schools and others represent different subject areas in an interdisciplinary way. There are also differences in their financial and staff resources and in the support they can provide for doctoral candidates. Thorough research pays off here.

A single database of all doctoral programmes does not yet exist. As a rule, however, the programmes can be found on the Internet. For example, the website of the German Research Foundation (DFG) offers links to the research training groups and graduate schools it funds. Numerous universities also offer structured doctoral programmes that they present on their websites. Universities' central student advisory services or graduate centres can also provide further assistance. In addition, non-university research institutions also offer doctoral programmes. These can be found on the institutions' websites. The DAAD maintains a database with over 300 international doctoral programmes located all over Germany. The database is updated annually.

The European Economic Area (EEA) encompasses the member states of the European Union and Iceland, Liechtenstein and Norway.

The Registration Office or Citizens' Service (Einwohnermeldeamt or Bürgerservice) is the place to register on arrival in Germany and to deregister and reregister following any subsequent change of address.

The Aliens' Authority (Ausländeramt or Ausländerbehörde) is the municipal office that deals with all aspects of the law concerning foreigners and residence permits. The Aliens' Authority in the district which is or should be the main domicile is responsible for all matters concerning residence rights.

3. I Before you start



Prospective doctoral candidates should start looking for all the relevant information early on.

FROM SEARCH TO APPLICATION

The range of interesting doctoral programmes is enormous due to the diverse offerings of graduate schools, research training groups, non-university research institutions and binational university partnerships. The following questions should lie at the heart of your search: Is the programme suitable? Does it have appropriate resources? Is it the right environment for my research project? What are the requirements and what is expected of doctoral candidates? Sometimes application deadlines apply for acceptance in programmes. That's why potential applicants should begin their search for the right programme in good time before completing their undergraduate studies.

MULTISTAGE PROCEDURE

For an application to be successful, the planned doctoral thesis has to fit in with the main emphases of the programme and the applicant needs to have a good to very good degree that is recognised in Germany. Initial contact then usually takes place over the Internet.



The details of the application process differ from programme to programme. The actual application process is often a multistage procedure. During the first stage, candidates usually have to submit a curriculum vitae, a copy of their degree certificate, a brief outline of the planned doctoral thesis and a statement explaining the reasons for their application. In a second stage, usually on request, applicants are asked to submit a detailed application with an extensive exposé of their research project. This includes a time plan, references from past university teachers, copies of all certificates and the undergraduate dissertation as well as, if required, proof of language skills. If these documents are convincing, the applicant receives an invitation to a personal interview, which, depending on the circumstances, can be conducted on the telephone.

LINKS

The joint research directory of DFG and DAAD provides information on more than 22,000 institutes at German higher education institutions and non-university research establishments according to geographical, subject and organisational criteria: www.research-explorer.de > English

This database gives users an overview of international programmes that match their personal profile: www.daad.de/idp

This database enables searches for doctoral positions or places in doctoral programmes: www.phdgermany.de

This website is run by the office responsible for recognising higher education qualifications: www.recognition-in-germany.de

The Higher Education Compass enables users to discover the requirements for studying for a doctorate at individual universities: www.hochschulkompass.de/en/doctoral-studies

This web page offers practical advice about preparing a stay and entering Germany:

www.research-in-germany.org/research-stay



passionate about neuroscience and was looking for something scientifically exciting but at the same time clinically relevant. Here, I found the perfect combination."

Ioana Goganau from Romania is enrolled in the HBIGS international PhD programme in molecular and cellular biology at the University of Heidelberg.





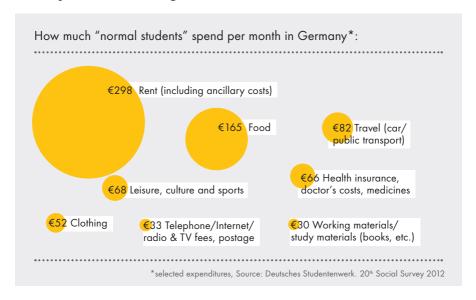
4. Support and funding

LIVING AND STUDY COSTS

The most important question that arises when people start preparing for a doctorate is how much it will cost and how it can be financed. Although no tuition fees are payable for doctoral study in Germany – at least not at public higher education institutions – students naturally need money to live on. In fact, anyone who applies for a visa for undergraduate or doctoral study in Germany currently has to prove access to at least 8,040 euros a year. As a rule, however, this sum is not enough to cover all the costs. According to a survey by Deutsches Studentenwerk, a student in Germany spends an average of roughly 794 euros a month on rent, food, clothing, travel, working materials, leisure activities and such like. If you are enrolled at a higher education institution, you will also have to pay semester fees (Semesterbeiträge). Students who pay these fees receive a student card that enables them to buy discounted tickets for public transport and eat cheaply in the refectory (Mensa). In addition, you can often pay reduced prices at the swimming baths or the cinema.

The semester fee (Semesterbeitrag) is a levy that students have to pay the higher education institution. Payment is the precondition for both enrolment and re-enrolment in the following semester. As a rule, these fees are between 75 and 250 euros a semester. If a season ticket for the local public transport network is included, then they are more likely to be at the higher end of this range. The semester fee should not be confused with the tuition fees that can be charged, for example, by private higher education institutions.

The refectory (Mensa) is the university canteen run by student services (Studentenwerk).



Students who opt for a structured doctoral programme usually already have financial support: doctoral candidates in research training groups and graduate schools or programmes at non-university institutions normally either work on a research project as a research associate or receive a scholarship. Under certain circumstances, students who have opted for the traditional individual path to a doctorate can also receive a scholarship or a job at the university. Otherwise, they need to look for other means of funding. In all, 80% of postgraduate students in Germany engage in one or more forms of gainful employment, which can involve research work or a part-time job outside the university. On average, doctoral candidates spend 28 hours a week engaged in such activities.

FUNDING MODELS: SCHOLARSHIPS

If you have very good final grades and references, you can apply for one of the numerous funding programmes that also support foreign doctoral students with a scholarship. The largest awarder of scholarships, especially for international doctoral candidates, is the German Academic Exchange Service (DAAD). In 2012 alone, the DAAD supported over 4,700 international doctoral students in Germany with scholarships. Large organisations that support gifted students (Begabtenförderungswerke) are also possible partners for highly qualified foreign doctoral candidates. Acceptance as a doctoral student at a German university is required. There is also a large number of smaller foundations and scholarship programmes that award scholarships to gifted international doctoral candidates, some of them for specific subjects, countries or projects. A useful search tool for these programmes is provided by the DAAD database that can be accessed at www.funding-guide.de.

RESEARCH ASSOCIATE JOBS

There are very many different ways of funding a traditional individual doctorate. Employment at a university is especially common among German doctoral candidates.

13 organisations that support gifted students (Begabten-förderungswerke) have come together under the umbrella of the Federal Ministry of Education and Research (BMBF). They provide funding for especially talented students, including international students.

As a rule, doctoral candidates work at the chair of their supervising professor as research associates with temporary part-time contracts. They usually perform duties as teachers, in research projects or in the administration.

A large number of funding opportunities also exist outside higher education. Numerous organisations aim to nurture fresh research talent and welcome contacts from international students. Non-university research institutions, such as the Max Planck Society, the Helmholtz Association, the Leibniz Association and the Fraunhofer-Gesellschaft, which do not have the right to award doctorates, cooperate with universities for this purpose. They offer scholarships and/or work contracts for doctoral students, which are generally for a fixed period. In this case, doctoral students are usually integrated into a structured, interdisciplinary training programme. However, funding is also possible within the framework of normal positions; that is especially typical in the case of the Fraunhofer-Gesellschaft.

Jobs for doctoral candidates in industry usually offer fixed-term work contracts on a part-time basis, opportunities for application-oriented research in an industrial setting and favourable prospects for the time after completing the doctorate. Research-oriented companies are especially interested in attracting doctoral students. In addition, there are also collaborative projects between universities and companies in the field of applied research. Here, as a rule, doctoral candidates are employed by the university and study for their doctorate in a research training group. Doctoral candidates collaborate on a research project in mixed teams consisting of company and university employees.

Non-university research facilities such as Fraunhofer Institutes also offer opportunities to study for a doctorate in industry-related and application-oriented research projects in cooperation with different higher education institutions. Here doctoral students have a regular job and



Financial planning is required for the work on a doctorate.

Research associates are members of staff at higher education institutions or research institutes. At higher education institutions, research associates work in research projects, generally also give seminars and perform administrative duties. Most positions for research associates are temporary.



It is also possible to study for a doctorate alongside a normal job.

work on research projects with partners from industry. The doctoral subject is related to the day-to-day research work. The doctoral project is supervised by a professor from a cooperating university.

If you work as a student assistant or academic assistant at a university, you have to notify the Aliens' Authority. In this case, however, the permitted maximum number of working days per year is unrestricted – unlike in part-time jobs outside the university.

SIDE JOBS OUTSIDE RESEARCH

Of course, it is also possible to study for a doctorate while working in a job where the employer does not provide concrete support for the student's research project. That is not an easy route to take, though, especially for international doctoral candidates for whom different entry and residence requirements then apply.

Someone who would like to study for a doctorate independently and does not have a full-time job can also finance his or her living costs with a side job — either entirely or in addition to a scholarship. Help in finding work is available from the job placement office at student services (Studentenwerk), among other places.

Doctoral students from the European Economic Area or Switzerland who would like to work in Germany do not require a work permit. Transitional arrangements still ap-



DID YOU KNOW ...

... that 79% of international students are happy with the relatively low living costs in Germany – compared to the international average of only 59%?

... that over 14,000 postgraduates in Germany receive support from German research organisations?



ply to citizens of Croatia. Non-EU citizens, however, should enquire about possible employment restrictions. In any event, they should obtain permission from the Aliens' Authority and/or the Federal Employment Agency (Bundesagentur für Arbeit) before starting work. This is not compulsory, but is extremely helpful in gaining a correct appraisal of the situation. The same applies for spouses of doctoral candidates who would like to work in Germany.

HNKS

An overview of funding organisations, databases and programmes is available at www.research-in-germany.org/funding

The DAAD offers an extensive scholarship database at www.funding-guide.de

Euraxess, the initiative for internationally mobile researchers. presents information on different funding programmes and details of numerous job vacancies at

•

www.euraxess.de/en

The DAAD's PhDGermany database helps users find a suitable doctoral position: www.phdgermany.de

• Future doctoral students can receive help in finding a research job at www.research-in-germany.org/career •

The Academics website is one of the largest German job markets for junior researchers on the Internet: www.academics.com

58 student services (Studentenwerke) are active in approximately 300 higher education institutions primarily in the fields of catering, housing, student finance, advisory and placement services as well as culture. They have joined together in a national organisation, Deutsches Studentenwerk

The Federal Employment Agency (Bundesagentur für Arbeit, BA) is a national body that is primarily active in the field of job placement. Its local job centres are called Agenturen für Arbeit. Fundamentallv. the Central Placement Office (ZAV), a specialised department of the Federal Employment Agency, must give its consent for non-EEA citizens to work in Germany. Exceptions apply for highly qualified individuals and for researchers.





5. Livable Germany

First-class research infrastructure is not the only argument for doing a doctorate in Germany. The industrialised country in the heart of Europe is also a good place to live. Germany ranks 6th out of 187 countries in the international Human Development Index. It is the world's fourth largest economy and a stable, democratic country that respects and protects the rights of its citizens and inhabitants. Furthermore, its moderate climate, varied landscapes, idyllic towns and international cities make Germany an attractive host country. Not only Hamburg, Berlin and Munich, but also the Baltic Sea coast and Upper Bavaria are among Europe's most popular travel destinations. German towns and cities offer a high quality of life and provide a wide and varied range of leisure activities for their residents. In many places, alongside museums, churches and palaces, you will find a free arts scene with innovative cultural, theatre and music projects.

Germany is also the right place for people who would like to explore Europe in their free time. The country is a good starting point for getting to know the region. The air, rail and road links with other countries are excellent. There is a high degree of mobility, and border controls no longer exist between 26 countries. The euro is now used as the means of exchange in 19 European countries, which means you do not need to exchange money when travelling between them.

Germany is a land of sports enthusiasts. Students, in particular, have a wide choice of sporting activities. Most higher education institutions organise their own courses, which not only cover popular sports like football, rowing and athletics, but also less common activities. "Uni sport" often enables students to try out entirely new sports in an easy and affordable way. Furthermore, the organisers offer excursions and climbing or skiing trips, for example. In addition to the extensive programmes offered by higher



DID YOU KNOW ...

... that Germany is one of the Top Ten most frequently visited countries in the world?

... that over 90% of the international students who live there consider Germany one of the safest host

... that 39 UNESCO World Heritage Sites are located in Germany?

... that there are more than 3,000 bread varieties in Germany?

3.5





If you
like travelling,
there is so much
to explore in
Germany and its
neighbouring
countries, and you
don't even need
a visa. I move
around a lot on the
weekends "

Avishek Anand
from India did a doctorate at
the International Max Planck
Research School for Computer Science in Saarbrücken
and is now a postdoctoral
researcher at the L3S Research
Center in Hannover.

education institutions, every German town has a range of sports clubs with relatively inexpensive membership subscriptions.

When it comes to cuisine, Germany also has a lot to offer. Almost every cuisine in the world can be found in big cities. Germans enjoy international food, but are also placing increasing emphasis on ecologically grown regional produce. University canteens provide a large and varied selection of healthy meals. Most towns have a wide range of eateries from inexpensive food outlets to gourmet restaurants.

WHAT IS IT LIKE TO LIVE IN GERMANY

It doesn't matter whether you live in a big city or a small town, study at a campus university or a university with lots of different sites, live in a hall of residence, a shared apartment or alone, Germany is a good and safe place to live. Its infrastructure is excellent. And so is the medical system. There is a closely knit network of both general practitioners and specialist physicians. The cost of health insurance is relatively moderate, often with especially favourable terms for students.

Over 84% of international students and doctoral candidates are satisfied with the living conditions in their host country Germany. What guest students like most is the comparatively low cost of living, the absence of tuition fees and the good transport links. Germany also scores points for the many opportunities to get to know other international students. Six international students describe what it feels like to live in Germany in a video for the German Academic Exchange Service (DAAD).

www.youtube.com/DAADBonn





There are lots of opportunities to get to know other young people.

POINTS OF CONTACT

- Advice and help in settling in are available from student representative bodies or departmental student groups and university international departments or welcome centres. In financial emergencies, the hardship funds of student services or the students' union (AStA) can provide bridging loans.
- Student services offer over 200 childcare centres (Kitas) for students with small children: www.studentenwerke.de/en > Topics > Studying with children > **Related Topics**
- Some universities have a dual career service for junior researchers. You can find out which higher education institutions are affiliated to the Dual Career Netzwerk Deutschland at its website www.dcnd.org.

Some higher education institutions offer a dual career service that assists partners of newly arrived researchers in looking for a job. They will often also provide help in finding accommodation, childcare facilities or schools as well as in dealing with authorities. .



Living in a hall of residence or a shared apartment is a good idea for international students. The rent is comparatively low and you quickly get to know other people.

COMPULSORY INSURANCE

Students in Germany are obliged to have health insurance cover. If you have a work contract, you will automatically receive health insurance. If you are insured in your country of origin, you should find out in good time whether your insurance cover is recognised in Germany. Student services at many higher education institutions offer service packages for international students that include not only accommodation and meals, but also health insurance.

LINKS

Interesting facts about all aspects of life in Germany – from politics and business to culture – are presented in the Federal Foreign Office's online handbook: www.tatsachen-ueber-deutschland.de

The Deutsches Studentenwerk (DSW) website has put together a set of useful hints for a good start in Germany. It also includes information on subjects such as employment, insurance and residence permits: www.internationale-studierende.de/en

Information about all aspects of arrival – from looking for accommodation to opening a bank account – is available at www.make-it-in-germany.com/en/for-qualified-professionals/living

······

.....





Imprint

Publisher

DAAD

Deutscher Akademischer Austauschdienst German Academic Exchange Service Kennedyallee 50 53175 Bonn (Germany) www.daad.de

Section International Research Marketing

Project Coordination

Dr. Katja Lasch (responsible), Ruth André, Janina Kimmel, Anna Wohlfarth

Publishing House, Layout and Typesetting

Frankfurter Societäts-Medien GmbH, Frankfurt

Editors: Dr. Helen Sibum (responsible), Dr. Sabine Giehle

Translation

Derek Whitfield

Printed by

W+S Druck und Medien, 53842 Troisdorf-Spich

Print-run

Completely revised and extended edition January 2015 – 20.000

© DAAD

Any reproduction, even of extracts, is only permitted with appropriate source details, and only with the publisher's approval. This publication was funded by the Federal Ministry of Education and Research.

Note

The DAAD places special emphasis on using language that treats women and men equally. The grammatical male form is occasionally used alone in this publication purely as a means of improving legibility. Naturally, these terms are meant in a gender-neutral way.

Photo Credits

Cover: Hüttermann/DAAD;

p. 4: Abbis/DAAD; p. 7: Gombert/DAAD; p. 8: Lichtenscheidt/DAAD; p. 9: Beowulf Sheehan;

p. 12: Lichtenscheidt/DAAD; p. 13: private; p. 16: Lannert/DAAD; p. 19: Lannert/DAAD;

p. 20: Lichtenscheidt/DAAD; p. 22: Lannert/DAAD; p. 24: Bernd Wannenmacher, Lichtenscheidt/DAAD;

p. 26: Ausserhofer/Himsel/DAAD; p. 27: Universitätsklinikum Heidelberg; p. 28: Otto/DAAD;

p. 31: Hagenguth/DAAD; p. 32: Bergmann/DAAD; p. 34: Ebert/DAAD; p. 36: private;

p. 37: Hüttermann/DAAD

About Research in Germany

The Federal Ministry of Education and Research (BMBF) launched the initiative to "Promote Innovation and Research in Germany" in 2006. Under the brand "Research in Germany – Land of Ideas", various promotional measures and events have been organised to present German innovation and research in key international markets on behalf of the BMBF. The initiative seeks to strengthen and expand R&D collaboration between Germany and international partners. For more information, please visit our website www.research-in-germany.org.









