

## Doctoral Studies at the University of Erlangen-Nürnberg

It is possible to undertake a doctorate in any of the disciplines offered at the University. Doctoral titles conferred by the University of Erlangen-Nürnberg are classified according to the School or individual subject area:

- Doctor of Theology (Dr. theol.)
- Doctor of Law (Dr. jur.)
- Doctor of Medicine (Dr. med.)
- Doctor of Dental Medicine (Dr. med. dent.)
- Doctor of Human Biology (Dr. rer. biol. hum.)
- Doctor of Philosophy (Dr. phil.)
- Doctor of Science (Dr. rer. nat.)
- Doctor of Business, Economics and Social Sciences (Dr. rer. pol.)
- Doctor of Engineering (Dr.-Ing.)

### Why do a doctorate?

Many university graduates about to take their final exams will face the question of whether or not to continue their studies with a doctorate. There are some subject areas, such as, Medicine or Chemistry, in which a doctorate is simply a basic requirement without which a career would be considered problematic. A doctorate is also essential for a career in research and science, for example, at a university or as a professor at a university of applied sciences. Not least, a doctorate can be of benefit for promotion to an executive level in a company, although, naturally, a doctorate alone is not sufficient to qualify for such a position.. Furthermore, care should be taken with the belief that if you are unable to find a job after graduating then doing a doctorate will open up a range of interesting career opportunities: it is sometimes the case that employers consider candidates with a doctorate to be over-theoretical and lacking in practical experience and so your job prospects may ultimately be no better than before undertaking a doctorate. When considering doing a PhD, it is important to bear in mind your personal interest in a particular academic subject, as well as career progression as motivation for your decision.

### Formal Requirements for Doctoral Study

Each School has its own 'Regulations for Doctoral Degrees'. These can be found on the Internet at: [www.fau.de](http://www.fau.de) -> linke Leiste „Studium“ -> „Rund ums Studium“ -> „Prüfungen – Prüfungsordnungen“ -> „Prüfungsordnungen“ and details can also be obtained from the Dean's Office of each School. These are usually only available in German.

If you are interested in undertaking a doctorate, but do not meet all of the requirements set out above, you are advised to read the more detailed conditions for acceptance outlined in the respective 'Regulations for Doctoral Degrees'. These may contain details of the particular circumstances in which it might be possible to use additional qualifications in order to be eligible for entry onto a doctoral programme. Unfortunately, there is not enough space in this leaflet to explain all possible options in detail.

The Bavarian University Law (BayHSchG) stipulates that doctoral students may be matriculated for a maximum of three years (with a possible extension of a further year in special cases). Doctoral students are not required to pay tuition fees. It will often take longer than three years to complete a PhD. However, it is possible to continue and finish a PhD after the three years' matriculation period has passed.

### *Studies*

A doctorate is usually undertaken in a subject that has been previously studied up to the level of master's or equivalent (state exams, "Diplom", "Magister") with an above average final grade. It is usually expected that a candidate will be a registered student at the

University of Erlangen-Nürnberg for at least two semesters before completing their doctoral studies (in order to prepare for the final assessment).

### *Supervisor*

The very first consideration for a potential doctoral student is the choice of supervisor who is willing and able to guide you in your academic study. This person must be a university lecturer / professor or a retired professor. The doctoral candidate is often expected to suggest possible topics for a PhD thesis. Think of a possible topic, make brief notes on your research proposal and then begin your search for a suitable supervisor. Potential PhD candidates should begin with a short synopsis outlining the research question and the proposed research methodology to be applied. The research project should be designed to be completed within two years. This research plan can, of course, be altered whilst work is in progress. Avoid subjects that are too general, as you will risk becoming easily overwhelmed by the scale of the topic.

### *Test of Suitability for a Doctor of Human Biology*

The Doctor of Human Biology offers graduates in arts, technical or natural science subjects, as well as veterinary medicine and pharmacy the opportunity to undertake doctoral studies at the Medical School. For this reason applicants for a doctorate in Human Biology are required to take an exam to determine whether they are academically suited to doctoral studies in the field of Medicine.

### *Language Requirements*

In order to undertake a doctorate in Theology (Dr. theol.) knowledge of Latin, Greek and Hebrew is required. A PhD in an Arts subject (Dr. phil.) requires qualifications in two foreign languages, proof of language knowledge can, for example, be provided by proof of five consecutive years of school teaching with a final grade of at least 4.0 ("sufficient"). Some subjects require knowledge of Latin and Ancient Greek. More detailed information can be found in the Regulations for Doctoral Degrees. Proof of language proficiency does not usually pose a problem for doctoral students as many students will have already demonstrated language ability in the final exam for the "Magister" or other university degrees.

### **Assessment**

A doctoral degree can only be awarded after production and publication of a doctoral thesis (Dissertation) and successful completion of an oral exam known as the *Rigorosum* or *Disputation* (oral defence).

### *Dissertation*

The doctoral dissertation constitutes the largest and most time-consuming part of a PhD programme. The dissertation involves an academic thesis, which deals in depth with a topic from a particular discipline. Writing the dissertation requires a profound academic interest in a particular subject as it is likely that the work will take several years to complete and research can entail many highs and lows.

If you are not 100% committed to your planned research project, then you should reconsider. As soon as possible, make a plan of the structure of your dissertation – even if this is only provisional – so as not to lose the thread or focus of your project. Once completed, your work will be marked by two assessors (one of whom will be your supervisor). The grades awarded vary according to subject areas from 1 to 4 and 1 to 6. As soon as the dissertation has been awarded a pass grade, an invitation to an oral exam will be arranged through the Dean of the School.

### *Oral Examination*

The invitation to the oral examination will usually be sent at least two weeks before the set date of the exam for most subjects, seven days for medicine and technical subjects and three days for business, economics and social science subjects. Precise details can be

obtained from the School. The exam is structured differently according to the particular discipline: it may take the form of a *Disputation* (defence of dissertation) and discussion of a range of cross-disciplinary topics (related to the subject area of the dissertation); it may take the form of a *Rigorousum* (examination of the main subject area of the dissertation and in one or two subsidiary subjects from within the same discipline) or a combination of both. The duration of the exam can vary depending on the School from between 30 to 120 minutes per topic/ subject for assessment. Precise details can be found in the various 'Regulations for Doctoral Degrees'.

#### *Publication of Dissertation*

Once the exam has been successfully taken, the only remaining hurdle before the doctoral title is fully conferred is the publication of the dissertation. Publication in this context means that hardback, bound copies of the work are made available to the academic community. A certain number of copies must be delivered to the University library. The work must be published within a particular timeframe: six weeks (Medical School), one year (Law School, School of Business and Economics, School of Engineering and School of Sciences), two years (School of Humanities and Social Sciences, School of Theology). The cost for printing these copies must be paid for by the candidate, which can become quite expensive (for example, the School of Humanities and Social Sciences require 110 printed copies of the dissertation) unless the work is published in a book, journal or similar.

#### **Personal suitability for doctoral studies**

Interest in the subject of your dissertation is often cited as the main reason for doing a PhD. Strong will and determination are also important factors to ensure that you are also able to overcome the low points in your research work or writing. The longer you spend working on a topic, the more obvious it may suddenly become how little you actually know. And then you are expected to express your own opinion on a particular subject! Add to that the possibility of writer's block and the situation can quickly become quite depressing. Either you give up or seek assistance: talking to your supervisor or with others in a similar situation can help.

In addition to these more psychological demands, time and money also play an important part in the process of obtaining a PhD. It should be evident that doing a PhD cannot be combined with a 40-hour working week. Yet, some financial security is required for the period of two to five years of doctoral studies. Some doctoral candidates find a position as a research assistant with a Chair, which pays a regular income. For most natural scientists and engineers this is the most usual situation, as they would otherwise not have access to the necessary laboratories or other research facilities. Some companies will support employees in obtaining a doctorate, providing that the PhD title or the topic of the dissertation are of benefit to the company. It is also possible that an employee could reduce their working hours to make time for doctoral studies.

#### **Funding Opportunities**

For those who are suitably qualified, but are not in a position to finance their PhD themselves, there are possible sources of financial support available. A few of these sources are outlined below. The list is not comprehensive.

##### *PhD Scholarships awarded as part of the Elite Network of Bavaria*

Value of scholarship: € 1050 monthly, + a possible family allowance of € 154;

Duration of scholarship: 2 years

The Free State of Bavaria provides scholarships for PhD students as part of the Elite Network. These scholarships are awarded by the Bavarian University e.V. (<http://www.uni-bayern.de>), which also provides further information, for example, on criteria for research projects. Please note that these scholarships are only allocated **on the recommendation of university lecturers or professors.**

Contact the Scholarship Office of the University of Erlangen-Nürnberg for information on scholarships available as part of the Elite Network of Bavaria.

*Scholarships for Female Students - School of Humanities and Social Sciences, School of Theology*

Value of scholarship: € 1050 monthly, + a possible family allowance of € 154;

Duration of scholarship: 1 year with the possibility of extension for a second year

These scholarships can be awarded to female doctoral students at the School of Humanities and Social Sciences, School of Theology of the University of Erlangen-Nürnberg who are able to demonstrate above average achievement and who have completed approximately one year of their doctoral dissertation. Details of these scholarships are advertised in January and September each year by the Graduate School of the University and begin the following April or October respectively.

*Research Training Groups, International Doctoral Groups, International Doctoral Programmes*

These are temporary University groups established in a variety of subject areas. PhD students can produce their dissertation in collaboration with a group of research students and academics. The decision on who receives funding is made by the respective Research Training Group or doctoral programme. An overview of current research training groups and Programmes can be found on the FAU Graduate School website [www.promotion.uni-erlangen.de](http://www.promotion.uni-erlangen.de)

### **Useful Addresses**

*Examinations Office – Doctoral Degrees*

School of Humanities and Social Sciences, School of Theology  
Halbmondstr. 6-8, Room 1.056, 91054 Erlangen, Tel. 09131/85-26402

Law School, School of Business and Economics  
Schillerstr. 1, 91054 Erlangen, Tel. 09131/85-22230, -29397

School of Business and Economics  
Findelgasse 7/9, 90402 Nürnberg, Tel. 0911/5302-643

Medical School  
Halbmondstr. 6-8, Room 0.051, 91054 Erlangen, Tel. 09131/85-22341

School of Sciences  
Halbmondstr. 6-8, Room 0.050, 91054 Erlangen, Tel. 09131/85-24063

School of Engineering  
Erwin-Rommel-Str. 60, 91058 Erlangen, Tel. 09131/85-27296

*Graduate School of the University*  
Schlossplatz 4, Room 0.011, 91054 Erlangen, Tel. 09131/85-25827

*Scholarship Office*  
Halbmondstr. 6, Room 0.032, 91054 Erlangen, Tel. 09131/85-24075

*Information & Advice Centre, Careers Service*  
Schlossplatz 3, 91054 Erlangen, Tel. 09131/85-23976, open daily 8.30 - 12.00.

ibz@zuv.uni-erlangen.de

*Internet Addresses*

European Council of doctoral candidates and young researchers: <http://www.eurodoc.net>

Doctoral Council of the European University Association: <http://www.eua.be/events/eua-council-for-doctoral-education/>

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Information & Advice Centre, Careers Service (IBZ)

Advice Office, Schloßplatz 3 in Erlangen, Room 0.021, Monday - Friday 8am – 6pm

Advice hotline 09131 85-23333 or -24444: E-mail: [ibz@zuv.uni-erlangen.de](mailto:ibz@zuv.uni-erlangen.de)

Information: [www.uni-erlangen.de/studium/](http://www.uni-erlangen.de/studium/)