



## **Table of Contents**

Doctorate	. 2
PhD Programme in Mathematical Sciences • University of Göttingen • Göttingen	-

## **Doctorate**



## PhD Programme in Mathematical Sciences

University of Göttingen • Göttingen

## Overview

Degree	Dr rer nat/PhD
Teaching language	• English
Languages	English
Programme duration	6 semesters
Beginning	Only for doctoral programmes: any time
Application deadline	Applications may be submitted at any time
Tuition fees per semester in EUR	None
Combined Master's degree / PhD programme	No
Joint degree / double degree programme	No
Description/content	Mathematics is advanced by interaction with its application and, in turn, is key to progress in technology and science. In Göttingen's mathematical history, this is exemplified by Carl Friedrich Gauss, who was inspired by his work in astronomy and geodesy. Later on, around 1930, the close and fruitful collaboration between mathematicians and physicists in Göttingen led to the mathematical theory of quantum mechanics. This interaction of mathematics with applications such as data science continues to play a prominent role in the School of Mathematical Sciences as well as in the associated research training groups and the collaborative research centre. This illustrates a commitment to train young mathematicians in conducting independent research, enabling them to make a contribution in industry and commerce, in educational and research institutions.
	Main features:
	<ul> <li>Research-based teaching and learning – featuring intensive training and cutting-edge research projects in pure and applied mathematics, emphasising independent research on the part of the students</li> <li>Interdisciplinarity and methodological foundations – covering a broad range of topics, thereby connecting theoretical mathematical problems, application-relevant problems, and interdisciplinary projects, e.g., in economathematics, mathematical physics, and mathematical data science</li> <li>Internationality and cooperation – enhancing students' ability to work in international networks and partnerships, extending and promoting collaboration with research establishments in science, commerce, and community in and around Göttingen, in Germany, and abroad</li> </ul>

### **Course Details**

#### Course organisation

The PhD programme in Mathematical Sciences at the University of Göttingen as well as the associated research training groups "Fourier Analysis and Spectral Theory" and "Discovering structure in complex data: Statistics meets Optimisation and Inverse Problems" and the collaborative research centre "Mathematics of Experiment" provide a teaching programme featuring cutting-edge lectures and seminars.

A special emphasis is put on international scientific exchange achieved through a twofold approach. On the one hand, a comprehensive visitor programme is geared towards the research and teaching projects of the research groups while, on the other hand, support is provided for students going abroad.

Finally, students improve their soft skills in order to strengthen their personal responsibility and to gain competencies relevant for their future professional life. Scholarships are available for outstanding candidates.

The PhD programme in Mathematical Sciences is part of the Georg-August University School of Science (GAUSS) offering structured doctoral education, promoting excellent research in mathematics and natural sciences (https://www.uni-goettingen.de/en/563915.html).

Part-time studies are possible.

#### International elements

- International guest lecturers
- Language training provided
- Training in intercultural skills
- Integrated/optional study abroad unit(s)

## Integrated/optional study abroad unit(s)

Within the framework of the Erasmus+ programme, students can study abroad for one or two semesters at one of 20 Erasmus+ partner institutions in 12 European countries.

The Global Exchange Programme of the University of Göttingen enables students to spend one or two semesters studying or researching at one of almost 60 partner universities in 18 countries on six continents.

### Integrated internships

None

## Teaching/work obligations or opportunities

Doctorate students may get involved in the (under)graduate study programmes as teaching assistant.

## Special promotion / funding of the programme

- DAAD
- DFG (e.g. Research Training Groups)
- Other (e.g. state level)

### Name of DAAD funding programme

GSSP

## Course-specific, integrated German language courses

No

Course-specific, integrated
English language courses

No

## **Costs / Funding**

Tuition fees per semester in EUR

None

Semester contribution

Fees amount to around 400 EUR per semester. Fees include prepaid semester ticket that entitles students to use regional trains in Germany free of charge.

Fees: https://www.uni-goettingen.de/fee

Semester ticket: https://www.uni-goettingen.de/en/16432.html

Costs of living

The average cost of living in Göttingen is modest compared to other major university cities in Germany. Currently, expenses for accommodation, food, health insurance and books are about 1,100 EUR per month. Please note that fees for health insurance may vary according to age. Living expenses might be slightly higher.

Students of the University of Göttingen receive discounts for cultural events. Meals and drinks are available at reduced prices at all university canteens.

For further information, please see the following link: www.uni-goettingen.de/en/54664.html.

Funding opportunities within the university

Yes

Description of the abovementioned funding opportunities within the university https://www.uni-goettingen.de/en/473507.html

## Requirements / Registration

Academic admission requirements

Excellent Master's degree in mathematics or physics

Students of a university of applied sciences or "Berufsakademie" and exceptionally qualified holders of a Bachelor's degree may also apply. They may have to go through a two-semester qualification period before they can eventually be admitted into our doctoral programme.

Language requirements

English proficiency at level C1 or higher (e.g. IELTS band 7.0 or TOEFL iBT 94)

Application deadline

Applications may be submitted at any time

Submit application to

Georg-August-Universität Göttingen Faculty of Mathematics and Computer Science Bunsenstr. 3–5

37073 Göttingen Germany

### **Services**

### Possibility of finding parttime employment

The university supports students in finding part-time jobs in local industries and businesses. A number of student jobs are also available at the university. They are announced on the following website: www.stellenwerk-goettingen.de.

Please note that restrictions may apply with your scholarship or work contract.

Non-EU students are allowed to work for a maximum of 120 full days (240 half days) per year.

#### Accommodation

The Accommodation Service of the International Office supports international students who are enrolled at the University of Göttingen to find accommodation in Göttingen and serves as a point of contact for queries. The service works together with the private market in Göttingen and the Student Services ("Studentenwerk"). As the amount of accommodations in Göttingen is limited, it is highly recommended to contact the Accommodation Service as early as possible. For further information, please see the following link: https://www.uni-goettingen.de/en/617883.html.

## Structured research and supervision

Yes

## Research training / discussion

Yes

### Career advisory service

The Career Service offers individual support whether you want to work in Germany or abroad.

Especially for international students aiming for a career entry in Germany there are workshops, online learning modules, and a qualification programme as well as digital career tools and a virtual community for international employment opportunities.

For international students and prospective graduates, the "Start Guides" project offers assistance in developing and realising individual career perspectives in Germany.

If you have a promising business idea or are interested in the topic of founding a company, start-up support is offered! The university supports you with advice, funding, qualification formats and network contacts.

# Support for international students and doctoral candidates

- Specialist counselling
- Accompanying programme

### General services and support for international students and doctoral candidates

International Office of the university

German students help newly arrived students to adapt to the university and the city during their first weeks.

There is also an orientation week for new international students, which provides valuable information about Göttingen and the university.

Study Buddy Programme as a part of the project Integration and Diversity at Göttingen University (InDiGU)

Foyer International: Cultural evenings and more for all students

### **Contact**

### **University of Göttingen**

Faculty of Mathematics and Computer Science

Bunsenstr. 3-5 37073 Göttingen

- Course website: https://www.uni-goettingen.de/en/473507.html
- f https://www.facebook.com/University.of.Goettingen
- https://twitter.com/unigoettingen
- in https://www.linkedin.com/school/-university-of-goettingen/
- https://www.instagram.com/unigoettingen

Last update 12.12.2024 12:54:13

## International Programmes in Germany - Database

www.daad.de/international-programmes www.daad.de/sommerkurse

#### Editor

DAAD - Deutscher Akademischer Austauschdienst e.V. German Academic Exchange Service Section K23 – Information on Studying in Germany Kennedyallee 50 D-53175 Bonn www.daad.de

### **GATE-Germany**

Consortium for International Higher Education Marketing www.gate-germany.de

### Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.

