



## Required Skills

- You are interested in mathematics and enjoy logical thinking and reasoning.
- You are persistent and you like to get to the bottom of things.
- You are open to exploring new ideas and confronting challenging problems.

## Admission Qualification

**Bachelor:** Entry qualification is a German Abitur or a degree that is recognized as equivalent and very good German language proficiency. Details can be found on the following pages:

[www.uni-potsdam.de/en/studium/application-enrollment/before-application-enrollment/hzb](http://www.uni-potsdam.de/en/studium/application-enrollment/before-application-enrollment/hzb)

**Master:** For admission to the Master program, you must hold a Bachelor's degree in mathematics, or an equivalent degree.

## Application and Admission

Admission to the Bachelor degree program is for the winter term. For the Master degree program admission is for both winter and summer term. Current information on the application and admission procedure can be found at: [www.uni-potsdam.de/studium/en/application-enrollment/](http://www.uni-potsdam.de/studium/en/application-enrollment/)

## Further Information

Information on the Institute for Mathematics of the University of Potsdam and our current activities can be found at:

[www.math.uni-potsdam.de/en/](http://www.math.uni-potsdam.de/en/)

## Contact

### Academic Advising

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[www.math.uni-potsdam.de/en/study/](http://www.math.uni-potsdam.de/en/study/)

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### Central Academic Advising

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[www.uni-potsdam.de/studium/en/advising-and-services/zsb/](http://www.uni-potsdam.de/studium/en/advising-and-services/zsb/)

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Bildquellen: sxc.hu - LMorris2 (Titel), Mathias Friel (Außenseite 1)



Universität Potsdam

**MATHEMATICS**

Bachelor of Science | Master of Science

## Content of the Studies Program

The abstract beauty of modern day mathematics is only matched by its remarkable efficiency in applications in nearly every area of nowadays science. These applications reach from medicine, neuroscience, telecommunication to financial models and ecology. A degree in mathematics provides the knowledge and skills to apply mathematical models, to expand and develop the underlying theories and concepts. The Institute of Mathematics of the University of Potsdam offers students a friendly, individual and comprehensive assistance in every aspect of their studies. To complement their mathematics curriculum, the students are given the option to take complementary subjects such as physics, computer science, biology, geology, chemistry or economy in order to get acquainted with applications relevant for their future career.

## Prospective Careers

The employment prospects of graduates in mathematics are excellent and offer a strikingly large variety of possibilities. Mathematicians work in industry, for banks and insurance companies, in administration as well as in research institutions and academia. Their tasks are many and diverse: development and application of methods in algebra, analysis, geometry, computational mathematics, analysis of random systems, numerical analysis as well as signal and data processing. They solve problems in optimization and develop models and simulations for complex processes in nature, economy and industry. Most importantly, future employers not only appreciate the wide range of knowledge of the graduates but first and foremost the perseverance and problem solving skills mathematicians acquired by mathematicians throughout their training.

## Objectives

- Students acquire competent and readily applicable knowledge of mathematical methods and theories. This is based on the well developed ability to approach problems in an analytical and structured way.
- By the end of their Bachelor's degree, students have acquired the basic knowledge to start off a professional career.
- The Master's degree program extends the knowledge and skills acquired with a Bachelor's degree. Students choose individual specialization areas in which they get acquainted with current research topics.

## Study and Research Environment

Studying at the University of Potsdam takes place in small groups both for lectures and exercise sessions, a privileged setup which offers many opportunities for interactions with lecturers and fellow students. In a friendly atmosphere, and thanks to an individualized mentoring program, students may refer to a faculty member, a mentor who serves as a guide in the process of choosing curricula and who provides useful advice throughout the semester. The University has tight connections to academic and extra-academic research institutions in Potsdam and the greater area of Berlin and Brandenburg. This offers the opportunity for Master and PhD students to get in touch with research teams and companies to complement their academic training.

## Curriculum

The Master's degree program is a follow up of the Bachelor's degree program. The duration of the studies is of three years (divided into six semesters) for the Bachelor's degree, and two years (divided into four semesters) for the Master's degree.

## The Bachelor Program

The first two years of the Bachelor's degree program are devoted to the foundations of mathematics. The third year offers opportunities for individual specialization.

1st year	Foundations: Analysis, Linear Algebra and Analytical Geometry	Minor
2nd year	Extension: Algebra, Analysis, Computational Mathematics, Geometry, Probability theory, Statistics	
3rd year	Individual Specialization and Bachelor thesis	

## The Master Program

Building on the knowledge acquired during the Bachelor's degree, the Master's program leads students to the current frontiers of research through individual specialization. The strong research focuses of the department of mathematics are reflected in the curricula through two distinctive profiles:

Structures in Mathematics inspired by Physics

Mathematical Modeling and Data Analysis

These two profiles complement each other and guarantee a consistent and focused education that is enhanced through the tight connection to extra-academic research institutions on campus. Furthermore, the program offers high flexibility and allows to choose individual specializations even from both profiles. In all questions concerning the planning of the curricula students can also rely on the assistance of their mentors.