### Prerequisites

In general, the prerequisite for master's studies at the University of Potsdam is an academic degree, such as a bachelor's degree. Your first degree should be in a subject that is relevant to your course of study, for example in the biosciences, biochemistry, biotechnology, or biomedicine. To be admitted to the program, you must provide documentation of your knowledge of molecular biology and biochemistry equivalent to at least 60 credit points.

Because this degree program is taught in English, very good English skills are required, corresponding at least to the B2 level of the Common European Reference Framework (CEFR) for Languages. Moreover, German skills are required at least the A2 level of the CEFR.

You can read more about the subject-specific admission requirements in the respective Admission Regulations: www.uni-potsdam.de/en/studium/studying/ legalfoundations/zulassungsordnungen-fuer-master

## Application

Are you interested in studying for the English-language master's degree in Biochemistry and Molecular Biology at the University of Potsdam? Then take the next step and get more information about the current application and enrollment procedures at the application website: www.uni-potsdam.de/en/studium/application-enrollment/ application-master

The course of study starts (1st semester) in summer or winter semester.

Stand: Mai 2022 Bildquellen: Institute of Biochemistry and Biology

## **Further Information**

Degree and Examination Regulations: www.uni-potsdam.de/en/studium/studying/legalfoundations/ studyregulations

## **Counselling & Contact**

Chair Examination Board Prof. Dr. Salim Seyfried Campus Golm, Building 26 Phone: +49 331 977-5540 E-mail: pabam2020@uni-potsdam.de

#### Vice-Chair Examination Board

Prof. Dr. Salvatore Chiantia Campus Golm, Building 25 Phone: +49 331 977-5872 E-mail: chiantia@uni-potsdam.de

### **Postal Address**

University of Potsdam Faculty of Science Institute of Biochemistry and Biology Am Neuen Palais 10 D-14469 Potsdam

#### Central Student Advisory Service

Division of Student Affairs Campus Am Neuen Palais, Building 08 Phone: +49 331 977-1715 E-mail: studienberatung@uni-potsdam.de www.uni-potsdam.de/en/studium/advising-and-services/zsb





# BIOCHEMISTRY AND MOLECULAR BIOLOGY

Master of Science





## **Program Content**

Modern life sciences require training of the next generation of scientists with strong background knowledge of key research areas. This has to be complemented with a solid understanding of state-of-the-art methods and technologies. Our international Master's program in Biochemistry and Molecular Biology focusses on a broad spectrum of research topics ranging from molecules to cells and animal or plant life. The different research teams in our program have core expertise in the fields of biomedicine, molecular plant sciences, evolutionary systems biology, and macromolecular systems. Master's students will be involved in research using the latest technologies in genomics, genetics, systematic bioand protein analysis, and high-end microscopy. Currently, an international and diverse group of approximately 150 students is enrolled in the program while living in the Potsdam/Berlin area, one of Germany's culturally and scientifically most vibrant regions.

This Master's program combines exciting basic research in the following core areas:

- Biomedicine
- Molecular plant sciences
- Evolutionary systems biology
- Macromolecular systems

# Program Objective and Future Career Options

The master's program allows you to expand and deepen the skills, specialized knowledge, and methodological skills that you attained in your bachelor's studies. You will gain an overview of the current status of research in the fields of biochemistry, molecular biology, genetics, genomics, systems biology, and biotechnology. You will also gain a thorough understanding of the essential concepts in these fields. You will be able to formulate scientific problems on your own, select appropriate methods and techniques, and thus successfully work on complex projects and publish the results.

In this Master's program, you will study and work on cuttingedge research topics in biochemistry and molecular biology. This training will provide you with a comprehensive knowledge in the fields of modern sequencing technologies, genome manipulation, high-end light and electron microscopy, bioanalytical methods, as well as qualitative and systematic protein analysis. You will also learn to use biological databases, Internet-supported resources, and be in a position to interpret high-throughput data. The skills that you acquire in the master's program qualify you for work in research and development at biotech or biomedical companies, universities or other scientific institutions. Further career paths of our graduates are in science writing, journalism, science administration or management, and in academic research as a doctoral student.

## **Program Structure**

In the four-semester master's program, you will earn a total of 120 credit points (CP), consisting of the following modules and your master's thesis:



### Modules

Mandatory Modules	12 CP
Orientation Modules 3x lecture, seminar, 6-week research project	33 CP
Advanced Research Practical	5 CP
Elective Modules	40 CP
Master's Thesis	30 CP
Total	120 CPs

For additional information on specific modules, please consult the subject-specific Degree Regulations: www.uni-potsdam.de/en/studium/studying/ legalfoundations/studyregulations

### **Research Environment**

Studying at the largest department in the Faculty of Science enables you to do more than just participate in taught courses on cutting-edge topics. The program's practical orientation provides great opportunities for first-hand research involvement because of our extensive network of extramural institutes and research institutions, such as the Max Planck Institute for Molecular Plant Physiology (MPIMP), the Max Planck Institute of Colloids and Interfaces (MPIKG), the Fraunhofer Institute for Biomedical Technology (IBMT), and German Institute of Human Nutrition (DIFE).