

The Department of Natural Sciences is located in the city of Rheinbach, a pleasant town embedded in the recreation area of the Eifel, inviting to all kinds of leisure activities. Our Campus can be reached from Bonn by train in only 30 minutes using the semester ticket, which is included in the semester fee. Accomodation is readily available in the University's surroundings. For more information please contact the International Office.

## GOOD REASONS FOR STUDYING AT H-BRS

- Excellent technical infrastructure
- Modern, well-equipped laboratories
- Lectures in English
- Innovative teaching and assessment methods
- Lectures, exercises and laboratory classes in small groups
- Tutorial support
- Practical projects
- Strong connections to local industry
- Excellent research record
- Language center on campus
- International reputation



## AT A GLANCE

### Degree

Master of Science (MSc)

### Campus

Rheinbach

### Period of Study

4 Semester

### Beginning of the Programme

Each Winter Semester (End of September)

### Language

English

### Admission Requirements

Bachelor's degree or equivalent in biological sciences, grade at least „good“ (2.2). Proof of courses equivalent to 6 ECTS in the following topics: Molecular Biology/Genetics, Immunology, Developmental Biology, Human Biology and Physiology. Proficiency in English. For international applicants: paper-based TOEFL: minimum score of 550, computer-based TOEFL: minimum score of 213, or internet-based TOEFL: minimum score of 79. The original TOEFL score report has to be sent by ETS, our institution code is 7977. Each application will be examined by the Admission Committee.

### Deadline for Application

March 1<sup>st</sup> for Non-EU students and September 15<sup>th</sup> for German and EU students

[www.h-brs.de/en/anna/biomedical-sciences-msc](http://www.h-brs.de/en/anna/biomedical-sciences-msc)

## Department of Natural Sciences Biomedical Sciences

### Campus Rheinbach

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### Campus Sankt Augustin

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 [www.facebook.com/hsbrs](https://www.facebook.com/hsbrs)

## Biomedical Sciences Master of Science (MSc)



Stand 05/2018 Fotos: Eric Lichtenscheidt, Colourbox



**Hochschule  
Bonn-Rhein-Sieg**  
University of Applied Sciences

## ELECTIVE COURSES\*

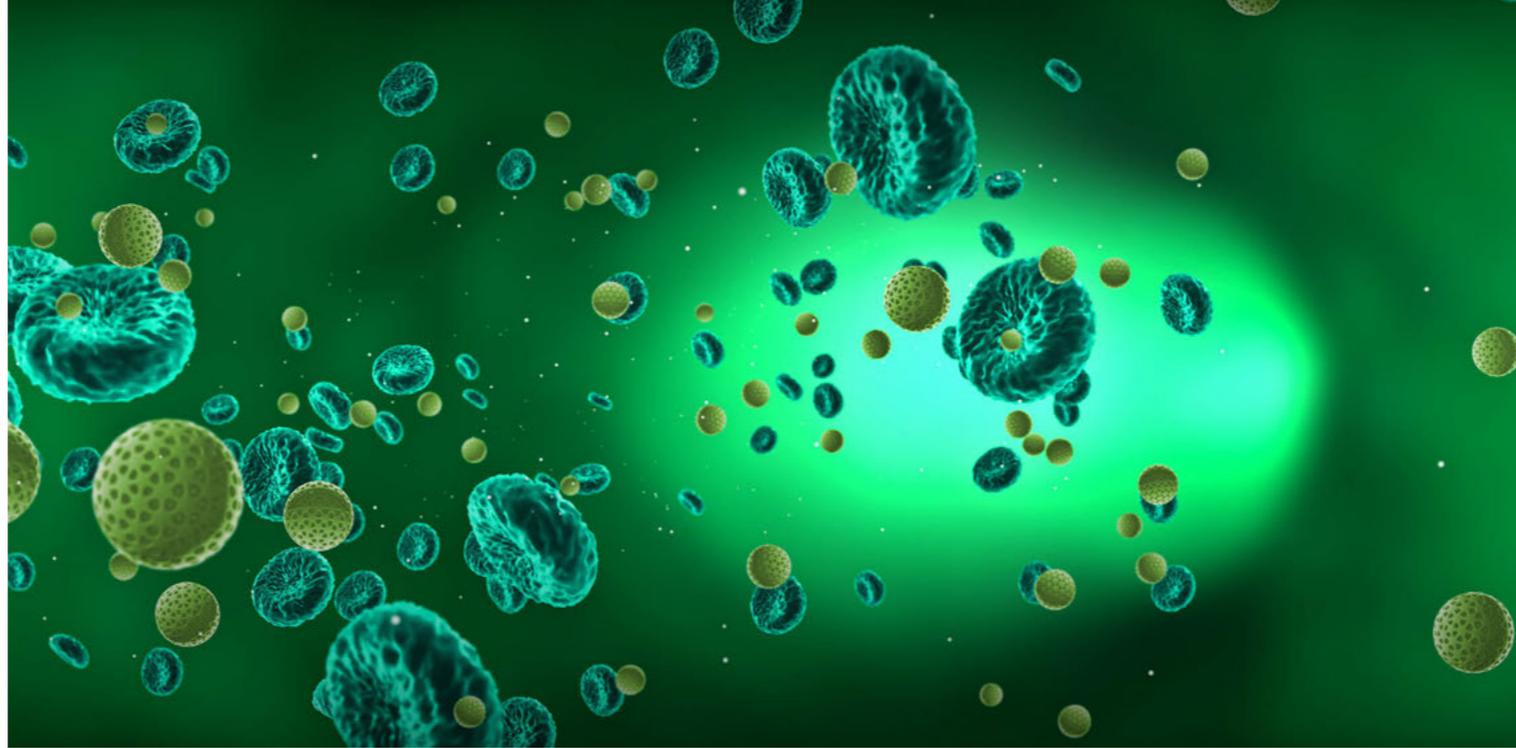
With a large number and a broad spectrum of elective courses or special fields this master programme offers you the opportunity to tailor your individual curriculum according to your interests and career plans. Please find below a list of elective courses or special fields of this master programme held in the last semesters:

- Advanced Bioinformatics
- Regulatory Affairs of Pharmaceuticals
- Epidemiology Research
- Interpreting and presenting scientific data in the field of neurodegenerative disease
- Stem Cell of Bone Metabolism
- Introduction to Flow Cytometry
- Mammalian Genome Analyses
- Drug Delivery
- Environment and Health
- Entrepreneurship & Healthcare Market
- Applied Biochemistry
- Cell based Therapies
- Inborn Errors of Metabolism
- Medical Devices Development and Regulation
- Principles of Membrane Transport
- Pharmacogenetics

*\*Please notice this list of courses is subject to change.*

## DEGREE

Successful students will be awarded with the Master of Science degree in Biomedical Sciences by the Hochschule Bonn-Rhein-Sieg, University of Applied Sciences. This degree enables graduates to apply for a PhD program at any university.



## PROGRAMME PROFILE

This Masters programme offers a wide range of theoretical and practical classes in the field of biomedical sciences. The multidisciplinary character of our faculty and our selected visiting lecturers allow us to offer a large number of diverse elective courses to choose from. The practical training includes state-of-the-art techniques, ranging from proteomics and advanced methods in human genetics to techniques used in clinical immunology. A strong focus on practical classes provides the opportunity to acquire strong and diverse technical skills.

We provide our students with a broad scope of in-depth insights in the biomedical field. In particular, the program covers research topics from biomedicine, pharmacology, neurobiology, immunology and physiology. Furthermore, applied topics such as toxicology, drug development, clinical research and regulatory affairs are also part of the curriculum. This degree programme is taught completely in English.

## CAREER PERSPECTIVES

The M.Sc. in Biomedical Sciences qualifies and prepares students for positions in research and development in medical, diagnostic or biological laboratories, both in academics and in pharmaceutical or biotech companies. Alumni of this program now hold positions in academic research but also in clinical research, consulting, product management or sales of pharmaceutical and biotech companies. Moreover, many graduates continue their studies by enrolling in PhD programmes.

## CURRICULUM

|                                    |                                 | ECTS |
|------------------------------------|---------------------------------|------|
| Module                             | <b>1. Semester</b>              |      |
|                                    | • Monitoring of Clinical Trials | 8    |
|                                    | • Pharmacology/Toxicology       | 8    |
|                                    | • Pathophysiology               | 8    |
|                                    | • Elective Course A1*           | 3    |
|                                    | • Elective Course A2*           | 3    |
|                                    | <b>2. Semester</b>              |      |
|                                    | • Virology                      | 8    |
|                                    | • Neurobiology                  | 8    |
|                                    | • Clinical Chemistry            | 8    |
|                                    | • Elective Practical Course*    | 6    |
|                                    | <b>3. Semester</b>              |      |
| • Medical Proteomics               | 8                               |      |
| • Human Genetics                   | 8                               |      |
| • Advanced and Clinical Immunology | 8                               |      |
| • Special Fields in Biology 1*     | 3                               |      |
| • Special Fields in Biology 2*     | 3                               |      |
| <b>4. Semester</b>                 |                                 |      |
| • Master Thesis and Colloquium     | 30                              |      |