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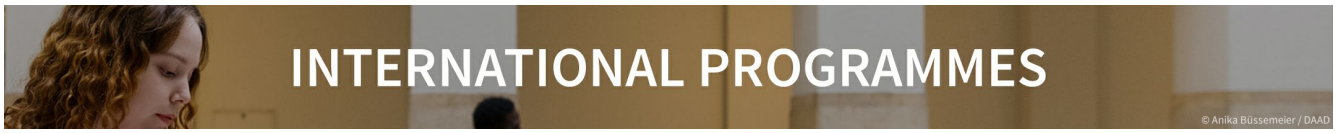
German Academic Exchange Service

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# Master's degree

## Master of Science in Biomedical Engineering

**Heidelberg University** • **Mannheim**

## Overview

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| **Degree** | Master of Science in Biomedical Engineering |
| **Teaching language** | • English |
| **Languages** | Courses are held in English. (Some optional supplementary courses are offered in German and can be chosen by students with German language skills who plan to work in a German-speaking environment.) |
| **Programme duration** | 4 semesters |
| **Beginning** | Winter semester |
| **Additional information on beginning, duration and mode of study** | Lectures start in September |
| **Application deadline** | Application period: 1 February – 15 March for the following winter semester |
| **Tuition fees per semester in EUR** | Varied |
| **Additional information on tuition fees** | Tuition fees for non-EU students are currently 1,500 EUR per semester. EU students generally do not pay tuition fees.<br><br>Please check Heidelberg University's website for current/updated information on tuition fees. |
| **Combined Master's degree / PhD programme** | No |
| **Joint degree / double degree programme** | No |
| **Description/content** | The Master's degree in Biomedical Engineering is an interdisciplinary programme open to graduates of physics, computer science, medical technology, biomedical engineering, and mathematics. A firm background in physics, computer science, and mathematics (at least six ECTS credits for each topic) is expected. The Master's programme in Biomedical Engineering emphasises research and offers the option of working in the field of medical physics and/or biomedical engineering with a strong orientation towards computer science. It meets the demand for specialists who not only have knowledge of technical devices and their usage but also have the potential to address the ever-increasing demand for programming abilities, which are likely to dominate technical solutions in medicine in the future. Graduates of this Master's programme are well equipped for various positions in industry and in research. |

## Course Details

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| **Course organisation** | All taught courses and laboratory rotations are covered in the first three semesters. Students gain fundamental knowledge in anatomy, physiology, genetics, biophysics, and engineering mathematics through mandatory introductory courses in their first study semester. These courses are the basis for advanced courses in radiation therapy, nuclear medicine, medical imaging as well as computational medical physics. These advanced courses can be selected according to students' interests. Students deepen their knowledge in the second and third semesters through practical laboratory rotations and further advanced lectures in image analysis, scientific visualisation, bioinformatics, and computer science-related fields in biomedical engineering. The final semester is reserved for the Master's thesis and a final examination on the overall content of the programme. |
| **A Diploma supplement will be issued** | Yes |
| **Course-specific, integrated German language courses** | No |
| **Course-specific, integrated English language courses** | No |

## Costs / Funding

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|---|---|
| **Tuition fees per semester in EUR** | Varied |
| **Additional information on tuition fees** | Tuition fees for non-EU students are currently 1,500 EUR per semester. EU students generally do not pay tuition fees.<br><br>Please check Heidelberg University's website for current/updated information on tuition fees. |
| **Semester contribution** | Approx. 190 EUR per semester<br><br>Please check Heidelberg University's website for current/updated information regarding the semester contribution. |
| **Funding opportunities within the university** | No |

## Requirements / Registration

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| **Academic admission requirements** | Applicants must possess a Bachelor's degree or equivalent (minimum 180 ECTS) in physics, computer science, medical technology, biomedical engineering, or mathematics. A strong basis of knowledge in physics, computer science, and mathematics is an essential prerequisite (minimum of 6 ECTS credits each). |

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| **Language requirements** | Applicants are required to submit ONE of the following:<br>• Current documentation of proficiency in English by means of one of the accepted certificates (For more details, see the admission regulations / application process.)<br>• Documentation that applicants are native speakers of English and have completed their schooling in one of the specified countries (For more details, see the admission regulations / application process.)<br>• Documentation that applicants completed the undergraduate degree required for admission in one of the specified countries (For more details, see the admission regulations / application process.)<br>• Documentation that applicants completed degree programmes that were exclusively conducted in English |
| **Application deadline** | Application period: 1 February – 15 March for the following winter semester |
| **Submit application to** | Please find the current/updated detailed admissions regulations and the application form, which the applicants are required to upload to the "heiCO" – Heidelberg Campus Online (https://heico.uni-heidelberg.de) campus management system, along with all of the required documents, here: https://heibox.uni-heidelberg.de/d/f0d487b4c73944b59b04/. |

# Services

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| **Possibility of finding part-time employment** | Students are permitted by law to work during their studies. However, we discourage students from working, as the study workload is very intense and students typically find it difficult to combine studies with work. A job may lead to poor study performance. |
| **Accommodation** | **Please note that the lectures mostly take place in Mannheim**. Therefore, we recommend that you search for accommodation in Mannheim.<br><br>Probably one of the cheapest options that you may consider:<br><br>Studierendenwerk Heidelberg: You can apply for accommodation using the following links:<br><br>https://www.studentenwerk.uni-heidelberg.de/en<br><br>https://www.stw.uni-heidelberg.de/en/node/95<br><br>We suggest that you complete the following entries with the provided information:<br><br>Location of university: Mannheim<br><br>Available choices of our student residences: Pettenkoferstrasse 19<br><br>University: Universität Heidelberg |
| **Support for international students and doctoral candidates** | • Specialist counselling |
| **General services and support for international students and doctoral candidates** | https://www.uni-heidelberg.de/en/study/international-studies |

# Contact

**Heidelberg University**
Medizinische Fakultät Mannheim

Theodor-Kutzer-Ufer 1-3
68167 Mannheim

Course website: https://www.uni-heidelberg.de/en/study/all-subjects/biomedical-engineering/

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# International Programmes in Germany - Database

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