

# Application

To apply for the study programme, you must hold a bachelor's degree (or equivalent) in either biology, physics, psychology, mathematics, or a related field, with at least 180 credit points. 60 credit points must have been obtained in one or more of the following areas:

Biochemistry, biophysics, biopsychology, cell- and molecular biology, cognitive sciences, computer sciences, genetics, human biology, human medicine, (techno-)mathematics, methodology, neuroscience, neuropsychology, statistics, theoretical physics, veterinary medicine, zoology.

**Successful application requires in addition:  
English level C1 Common European Framework of  
Reference for Languages (unless the last academic  
degree was obtained at a school, in which the  
primary language of instruction was English).**

**A Letter of Motivation explaining why you are choosing the programme and what your research interests are.**

**Deadline for application:**  
April 30

**Further details:**  
<https://www.uni-bremen.de/mscneuro/>

# Curriculum

The Master of Neurosciences programme is provided by the members of the Center for Cognitive Sciences (Zentrum für Kognitionswissenschaften - ZKW) at the Bremen University, with the participation of the Faculties of Physics, Biology/Chemistry, and Human and Public Health Sciences, and in cooperation with the Center for Advanced Imaging (CAI). The programme was designed to enable you to perform excellent research by first-class teaching. Close collaboration with e.g. engineering and computer science institutes of the University of Bremen and our extensive exchange with partner universities all over the world contribute to the rich possibilities of specialising in cutting edge neurosciences. The compulsory modules in the first semester provide basic theoretical knowledge, together with practical skills (programming and laboratory animal sciences) which are essential to the practical modules in the second semester (Advanced Studies I). Here, the students choose three modules from a catalogue of eight advanced studies. In the third semester, two six-weeks lab rotations (or hospitation in a clinic) will follow, which may also be performed in other institutions in Germany or abroad. These courses particularly aim at the consolidation and application of advanced theoretical and practical knowledge, and training of abilities in the area of experimental design and scientific communication. The studies end with the master's thesis (duration: six months). Courses are given in English.

# Curriculum

**A total of 120 credit points must be obtained:**

**Compulsory modules are:**

- Cellular and Molecular Neurosciences and Mentoring (6 CP)
- Systemic Neurosciences (6 CP)
- Theoretical Neurosciences (6 CP)
- Clinical Neurosciences (6 CP)
- Programming 3 CP)
- Laboratory Animal Science (3 CP)
- Master Thesis and Colloquium (30 CP)

**Compulsory optional modules are:**

Neuro- and Electrophysiology (9 CP)  
Neuropharmacology (9 CP)  
Experimental Neuroanatomy and Behavioral  
Physiology (9 CP)  
Psychophysics and Human Neurophysiology (9  
CP)  
Experimental Neuropsychology (9 CP)  
Cognitive Psychology and  
Electroencephalography (9 CP)  
Functional Neuroimaging (9 CP)  
Neurophysics (9 CP)  
Introductory week (3 CP)

Lab Rotation 1 (15 CP)  
Lab Rotation 2 (15 CP)



## Fields of activity

The neurosciences are among the most fascinating disciplines of life sciences. They combine concepts and methods from biology, physics, informatics, medicine, and psychology. Neuroscience research has a tremendous impact on our society, since it deals with the functioning and malfunctioning of the brain - the organ that governs our thinking, feeling and our behaviour.

This interdisciplinary Master Programme will provide you with a broad background in the neurosciences as well as with the possibility to specialise in a favourite subject. Equipped with the basics of the life sciences, in combination with fundamental theoretical, methodological and practical knowledge in the various fields of the systems- and cognitive neurosciences, you will be qualified for a career in a great variety of science-related occupations. This will provide you with a high flexibility on the labour market.

We will educate you to become a critically thinking scientist. You will receive extensive training and gather research experience to qualify you for PhD studies and an academic career. The scientific, technical and communication skills will open a broad spectrum of job opportunities in the industry, e.g. pharmacology, medical technology, robotics, industrial engineering, biotechnology, information technology, and data analysis.

## Contact

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### Center for Studies at the University of Bremen

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### Office for Programme of Study/Examination Board

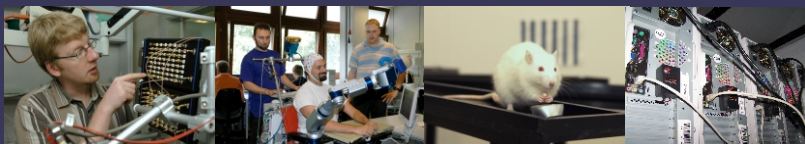
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### Further information:

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# Master of Neurosciences



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