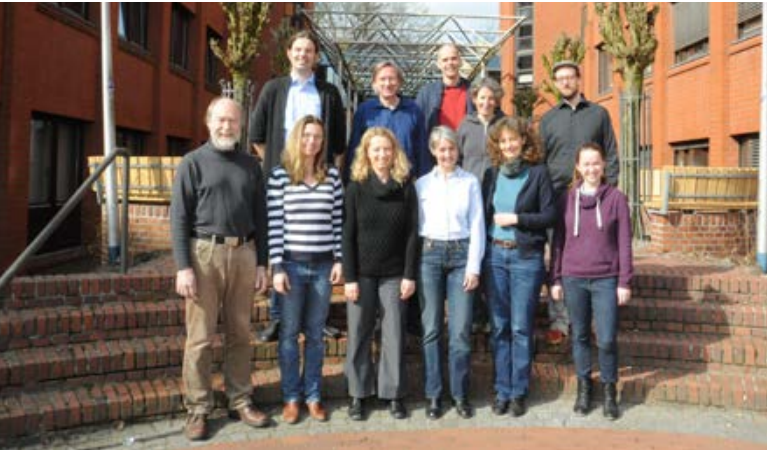


# Faculty

The Master program Neuroscience is jointly hosted by the School for Mathematics and Science and by the School for Medicine and Health Sciences at University of Oldenburg.



Our interdisciplinary faculty comes from the departments Neuroscience, Biology & Environmental Science, Psychology, Human Medicine and Medical Physics & Acoustics.

# Partner Institutions



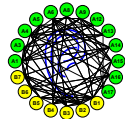
Research Center  
Neurosensory Sciences



Oltech / PhD Neurosensory Science  
and Systems



Cluster of Excellence  
Hearing4All



Collaborative Research Center  
The active auditory system

# Application

## Application Requirements

B.Sc. in Neuroscience, Biology, Psychology, Computer Science, Engineering or other related discipline.

Completed at least 12 CP courses in neuroscience and 12 CP courses in mathematics / statistics / programming. 6 CP of these 24 CP can be completed after admission to the program.

Proof of English proficiency, level B2.

Motivation letter, written in English.

## Application Procedure

### Applicants with German entrance qualification

Application period May 1 - 31

→ [www.uni-oldenburg.de/i-amt](http://www.uni-oldenburg.de/i-amt)

### International applicants

applications should be filed by March 31

→ [www.uni-assist.de](http://www.uni-assist.de)

Admission will be given to the best students depending on final grade. Additional bonus points can be earned by internships or participation in neuroscience projects, scientific publications or awards, at least one semester studied abroad, social engagement or volunteer work.

# Information

### Master program homepage

→ [www.uni-oldenburg.de/en/master-neuroscience](http://www.uni-oldenburg.de/en/master-neuroscience)

### Information requests about the program

[master-neuroscience@uni-oldenburg.de](mailto:master-neuroscience@uni-oldenburg.de)

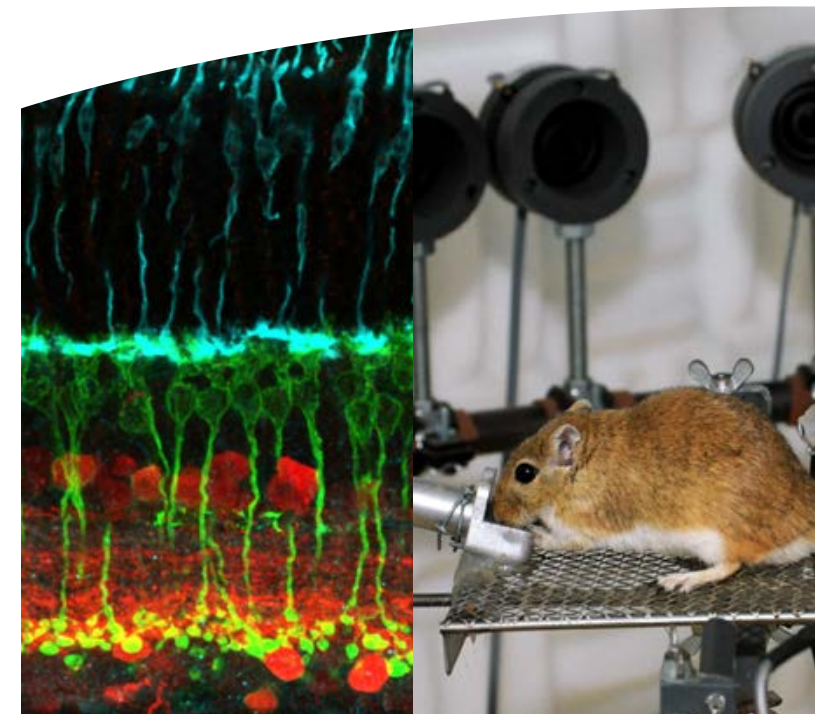
### General questions regarding studies in Oldenburg

→ [www.uni-oldenburg.de/zskb](http://www.uni-oldenburg.de/zskb)

[studium@uni-oldenburg.de](mailto:studium@uni-oldenburg.de)



# Master Program Neuroscience



[www.uni-oldenburg.de/en/master-neuroscience](http://www.uni-oldenburg.de/en/master-neuroscience)

# Why study Neuroscience in Oldenburg?

Focus: Sensory systems

Levels: From molecule to behavior

Science-oriented: Individual student research projects

Skills-oriented: Specific skills courses complement scientific education

Hands-on: Almost all courses include lab time or exercises

Intensive: Block courses focus on one topic at a time

International: All courses in English, optional semester abroad

Interdisciplinary: Teachers & students with mixed backgrounds, joint courses with Biology & Psychology

Flexible: Individual study plans, wide choice of courses

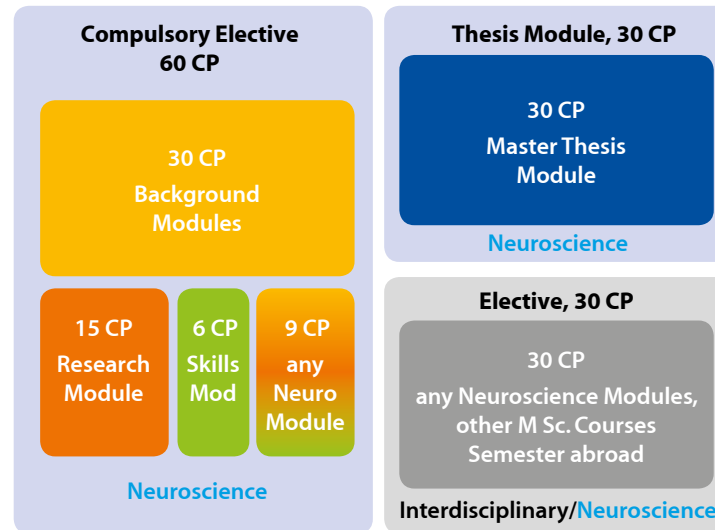
Personal: Small groups, close contact to teachers and scientists

Future perspectives in Oldenburg: Graduate school, cluster of excellence, collaborative science projects



## Curriculum

The program takes 2 years to achieve 120 ECTS credit points. There are no mandatory courses except for the master thesis.



## Background Modules

Provide background knowledge on a neuroscientific topic. Courses for 8-20 students are organized in full-time blocks of 2-7 weeks and usually consist of lecture, seminar and hands-on practical parts.

Molecular Genetics & Cell Biology	15 CP
Biochemical Concepts in Signal Transduction	15 CP
Neurosensory Science & Behavior	9 + 6 CP
Development & Evolution	9 + 6 CP
Computational Neuroscience	9 + 6 CP
Neurophysiology & Neuroanatomy	9 + 6 CP
Neurocognition & Psychophysics	15 CP

## Research Modules

Are individual student research projects in the supervisor's lab. The aim is to practice independent research, including experiments, background literature and presentation of results. Lab time lasts 6-7 weeks.

Auditory Neuroscience	15 CP
Molecular Sensory Neuroscience	15 CP
Neural Basis of Perception	15 CP
Visual Neuroscience	15 CP
Computation in Sensory Systems	15 CP
Development & Evolution of the Auditory System	15 CP
External Research Project	15 CP

## Skills Modules

Professional skills are developed in courses for up to 24 students.

Neuroscientific Data Analysis in Matlab	6 CP
Statistical Programming in R	6 CP
Bioethics	6 CP
Molecular Mechanisms of Aging	6 CP
Laboratory Animal Science	6 CP
Scientific English	6 CP

## Elective

After approval by the program director, 30 CP (one semester) can be chosen from:

All courses of the M.Sc. Neuroscience curriculum

Courses of related Master programs, e.g. Biology, Neurocognitive Psychology, Audiology, Computer Science

Up to one semester at an international university