FACULTY

The Master program Neuroscience is jointly hosted by the School of Mathematics and Science and by the School of Medicine and Health Sciences. Our interdisciplinary faculty comes from the departments Neuroscience, Biology & Environmental Science, Psychology, Human Medicine and Medical Physics & Acoustics.



STUDENT BODY

We represent and support all Master Neuroscience students and take an active role in shaping the program. Please do not hesitate to contact us!



APPLICATION

Application Requirements

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

- Completed at least 12 ECTS courses in neuroscience and 12 ECTS courses in mathematics / statistics / programming. 6 ECTS of these 24 ECTS 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

International applicants Applications should be filed by March 31 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 study abroad, social engagement or volunteer work.

Information

Master program homepage

www.uni-oldenburg.de/en/master-neuroscience master-neuroscience@uni-oldenburg.de

Student body

www.uni-oldenburg.de/en/student-body-neuroscience fachschaft.neuroscience@uni-oldenburg.de

General questions regarding studies in Oldenburg www.zsb.uni-oldenburg.de studienberatung@uni-oldenburg.de

CARL VON OSSIETZKY UNIVERSITÄT OLDENBURG

MASTER PROGRAM NEUROSCIENCE Focused on sensory systems



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 the 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 / research project abroad

Interdisciplinary: Teachers & students with mixed backgrounds, joint courses in Biology & Psychology Flexible: Individual study plans, wide choice of courses Personal: Small groups, close contact to teacher-scientists

Future perspectives in Oldenburg: PhD Neurosensory Science & Systems, Research Center Neurosensory Sciences, Cluster of Excellence Hearing4all, graduate schools, collaborative science projects



CURRICULUM

The program takes 2 years to achieve 120 ECTS. 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 practicals. Modules can be chosen in any combination.

Background module topics	30 – 69 ECTS
Biological background, research technique Molecular & cellular biology, biochemistry	12 + 12
Behavior & cognitive neuroscience	9 + 6
Computational neuroscience	12 + 6
Auditory neuroscience	12 + 6
Visual neuroscience	12 or 6
Invertebrate neuroscience	6 + 6
Development & evolution	9 + 6
Neurophysics & biophysics of reception	6 + 6
fMRI data analysis	12 or 6

RESEARCH MODULES

Are individual student research projects on a variety of different topics in the supervisor's lab at the University of Oldenburg or in any international neuroscience research lab. The aim is to practice independent research, including experiments, background literature and presentation of results. Lab time lasts 6-8 weeks.

Projects on all background module topics 15 – 45 ECTS

Research Module in Oldenburg or external 15 + 15 + 15

SKILLS MODULES

Professional skills are developed in courses for up to 25 students.

Skills module topics	6 – 45 ECTS
Data analysis in Matlab, Python, R Bioethics, seminars in ageing Scientific English Science communication Lab animal science	6+6+6 6+6 3+3 3

ELECTIVE

30 ECTS (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

