



Facts and figures

Start: Winter semester

Duration: 4 semesters

Degree: Master of Science

Language: German/English

Admission not restricted

Application and enrolment



Admission requirements

General admission requirements:

www.uol.de/stud/608en

Language skills:

German native speaker or DSH 2

English native speaker or level B2

Application

Application deadline: 30 September

German university degree:

Online application

www.uol.de/studium/bewerben/master

EU or international applicants:

www.uol.de/en/application/international-students/master

Contact

For questions about the subject/degree programme
Academic counselling for Physics, Engineering and Medicine

www.uol.de/en/subject-specific-student-advice

Student representatives for Physics

www.uol.de/en/student-bodies/

student-council-of-physics

fsphysik@uol.de

For questions about your studies

Study and Career Counselling Service

www.uol.de/en/zskb

Basic questions about application and enrolment

Student InfoLine

Phone +49 441 798 - 2728

study@uol.de

Visitor address

Student Service Centre – SSC

Haarentor campus, building A12

26129 Oldenburg

www.uol.de/en/students/service-advice

Further information

Physics, Engineering and Medicine website

www.uol.de/ptm/fach-master

Cluster of excellence "Hearing4all"

www.hearing4all.de/en

Degree programmes at the University of Oldenburg

www.uol.de/en/students/degree-programmes

Financing your studies

www.uol.de/en/students/fees/financing-your-studies

Optional period abroad

www.uol.de/en/going-abroad

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Carl von Ossietzky
Universität
Oldenburg

Physics,
Engineering and
Medicine

Master's degree



Physics, Engineering and Medicine (M.Sc.)

Master graduates who specialise in medical technology, neurosciences or acoustics can pursue a career in medical research, industry or medical practice after graduating from a programme with the right mix of theory and practice. The Master's programme in Physics, Engineering and Medicine provides the necessary skills. The practice-oriented, interdisciplinary study programme conveys and combines skills from physics and electrical engineering with theoretical competences in medicine, biology and psychology.

Career opportunities

The field of medical technology is one of the most rapidly evolving sectors in the world. This means excellent career opportunities for graduates.

The Master's degree qualifies them in particular for the following fields:

- Applied Physics
- Medical Technology
- Academic career (PhD) in Germany and abroad

Structure and contents

THEORY	12 CP	SEMESTER 1 / 2 / 3
Machine Learning / 6 CP Elective module Theory / 6 CP		
HEARING AND LANGUAGE RESEARCH	12 CP	
Psychophysics and Audiology / 6 CP Elective module Hearing Research / 6 CP		
NEUROPHYSICS AND NEUROTECHNOLOGY	12 CP	
Introduction to Neurophysics / 6 CP Elective module Neurophysics and Neurotechnology / 6 CP		
MEDICINE	12 CP	
Problem Solving in Medicine / 6 CP Advanced Seminar Physics – Technology – Medicine / 6 CP		
LABORATORY	18 CP	
Block Practical / 6 CP Project Practical in Physics – Technology – Medicine / 12 CP		
SOFT SKILLS AND AREA OF SPECIALISATION	9 CP	SEM. 4
Soft Skills / 3 CP Area of specialisation / 6 CP		
SPECIALISATION	15 CP	
Specialisation (preparation for Master's thesis) / 15 CP		
COMPULSORY	30 CP	
Master's thesis module		
MASTER OF SCIENCE	120 CP	

Reasons for studying

Through its focus on hearing and speech research as well as neurophysics, neurotechnology and medicine, the programme offers excellent training in the field of medical technology and enables an entry into a high-level research field and diverse career options in industry, medicine and academia.

The programme is linked to the Hearing4all cluster of excellence and therefore has a highly interdisciplinary quality, combining physics, medicine, acoustics and neurosciences. It offers early research contacts and opportunities to work in university and extra-university institutes such as Fraunhofer, HörTech and Hörzentrum Oldenburg.

