



Deutscher Akademischer Austauschdienst
German Academic Exchange Service



Table of Contents

Bachelor's degree	2
Bachelor of Engineering in Engineering Physics • Carl von Ossietzky University of Oldenburg • Oldenburg.....	2

Bachelor's degree



Bachelor of Engineering in Engineering Physics

Carl von Ossietzky University of Oldenburg • Oldenburg

Overview

Degree	BEng
In cooperation with	University of Applied Sciences Emden/Leer
Teaching language	<ul style="list-style-type: none">English
Languages	Courses are held in English, additional German courses are available. Participants can choose to write the Bachelor's thesis in either language.
Full-time / part-time	<ul style="list-style-type: none">full-time
Programme duration	6 semesters
Beginning	Winter semester
Application deadline	The application deadline is 15 October. However, it is recommend that applicants send in their applications by 1 July.
Tuition fees per semester in EUR	None
Joint degree / double degree programme	No
Description/content	<p>During the first two years, students will concentrate on physics and mathematics combined with an introduction to topics on engineering. In the laboratory projects, students are gradually introduced to self-contained laboratory work. The subject of specialisation (Laser & Optics, Biomedical Physics, Acoustics and Renewable Energy) is introduced in the third semester. Business administration and languages are part of the programme. Students have to complete an internship in the sixth semester.</p> <p>Biomedical Physics</p> <p>Modern medicine employs a multitude of sophisticated, physically based techniques both in therapy and diagnostics. Providing at first a basic foundation in anatomy and physiology, the specialisation "Biomedical Physics" goes on to emphasise on modern methods in medical radiation applications such as radiotherapy, nuclear medicine or radiology and basics of minimal invasive therapy including micromechanical and laser assisted methods as well as other imaging techniques such as ultrasound, Nuclear Magnetic Resonance and optical tomography. Well-established medical engineering physics such as medical electronics, data and image acquisition and processing, radiation biophysics, laboratory diagnostics and biomechanics are also</p>

covered. Combining engineering, scientific and biomedical skills, the graduate is well equipped with urgently needed qualifications for medical research and development. Training in the field of medical radiation physics is performed in cooperation with the Medical Centre for Radiotherapy and Nuclear Medicine at the Pius-Hospital Oldenburg.

Acoustics

The specialisation "Sound & Vibration" covers infrasound, audible sound, ultrasound and structure born sound and mechanical vibrations. Topics address digital signal processing, basics of radiation and wave propagation, physical and technical properties of electro-acoustic transducers, numerical calculation of mechanical vibrations, acoustic properties of matter, and evaluation of the impact of sound and vibrations on humans. Subjective perception of sound, physics of the ear, sound design of products, sound environment of transportation means, and noise abatement are fields of research in Oldenburg.

Laser & Optics

Laser technology and optics are key technologies of the 21st century. Fibre optic networks for data transmission, optical data carriers, or lithography for the production of microchips are examples. Optical diagnostics are indispensable in medicine and environmental technology. Lasers are a tool for cutting, welding, drilling, perforating and marking.

Renewable Energy

Education in the field of Renewable Energy (RE) is strongly correlated with models of the future energy supply. Much of the research in RE is conducted in disciplines like physics and engineering. RE research and education at the University of Oldenburg is focused on physical, technical, ICT, and economic issues of RE power generation and its system integration. Detailed information on RE based research, RE-related educational programmes (Bachelor's/Master's), and the diversity of RE courses can be found on the platform for the study of Renewable Energy at the University of Oldenburg.

Course Details

Course organisation

On the one hand, the programme is rather strictly organised, and students are encouraged to reach their goals in the scheduled period of time. For instance, lectures are supported by supervised work in small groups in the tutorials. On the other hand, personal initiative and individual work are encouraged through long-term projects in the laboratory.

Engineering physics is offered by the University of Oldenburg and the University of Applied Sciences Emden/Leer. During the first and second years, most lectures will be held in Oldenburg. There is one exception: the laboratory projects will take place partly in Emden. You will go to Emden once a week. You will receive a "Semesterticket" when you enrol, which allows you to use public transport free of charge.

Individual part-time studies are possible.

For further information, please see: <https://l.uol.de/ep>

» [PDF Download](#)

A Diploma supplement will be issued

Yes

International elements

- Specialist literature in other languages
- Language training provided
- Training in intercultural skills
- International comparisons and thematic reference to the international context

Integrated internships	Internship in a company or research institution within the subject area of specialisation: physics, engineering, or an individual specialisation
Course-specific, integrated German language courses	No
Course-specific, integrated English language courses	No

Costs / Funding

Tuition fees per semester in EUR	None
Semester contribution	Approx. 400 EUR per semester
Costs of living	You should expect to spend about 850 EUR per month to cover personal expenses (accommodation, health insurance, food).
Funding opportunities within the university	No

Requirements / Registration

Academic admission requirements	Entrance qualification to a Bachelor's degree or an equivalent (secondary school degree equivalent to German "Fachhochschulreife" or "Abitur") Please see: http://www.anabin.de
Language requirements	Command of English: B2 Command of German: A2
Application deadline	The application deadline is 15 October. However, it is recommend that applicants send in their applications by 1 July.
Submit application to	https://my.uni-assist.de/

Services

Possibility of finding part-time employment	Students are permitted to work while they pursue their studies. If you are a student from a non-EU country, you are allowed to work 120 full or 240 half workdays per year.
--	---

Accommodation

Furnished accommodation is available at a cost of 150-300 EUR per month (halls of residence or private).

If you want to come to Oldenburg from abroad, there is now less need to worry about accommodation or other organisational matters. The Studentenwerk Oldenburg offers international students a service package for 964 EUR, which includes accommodation for six months and other services that should help you get started. Furthermore, a counselling service is available to get you safely through your first weeks and months in Oldenburg.

For further information and an application form, please check:

<https://www.studentenwerk-oldenburg.de/en/international-students.html>

Support for international students and doctoral candidates

- Buddy programme
- Tutors
- Specialist counselling

Contact

Carl von Ossietzky University of Oldenburg

School of Mathematics and Science
Institute of Physics

Martin Reck

Carl-von-Ossietzky-Strasse 9-11
26129 Oldenburg

✉ engineering.physics@uni-oldenburg.de

🌐 Course website: <https://uol.de/en/physics/studies/courseofstudies/ep>

Last update 22.11.2024 09:56:47

International Programmes in Germany - Database

www.daad.de/international-programmes
www.daad.de/sommerkurse

Editor

DAAD - Deutscher Akademischer Austauschdienst e.V.
German Academic Exchange Service
Section K23 – Information on Studying in Germany
Kennedyallee 50
D-53175 Bonn
www.daad.de

GATE-Germany

Consortium for International Higher Education Marketing
www.gate-germany.de

Disclaimer

The data used for this database was collected and analysed in good faith and with due diligence. The DAAD and the Content5 AG accept no liability for the correctness of the data contained in the "International Programmes in Germany" and "Language and Short Courses in Germany".

The publication is funded by the German Federal Ministry of Education and Research and by contributions of the participating German institutions of higher education.



Federal Ministry
of Education
and Research