at a glance

Strong engineering skills combined with a firm grasp of basic underlying physical principles: these are the qualities that have made German engineers the benchmark for comparison throughout the world. In a unique collaboration, the University of Oldenburg and the University of Applied Sciences Oldenburg/Ostfriesland/Wilhelmshaven, offer the degree program Engineering Physics, designed to instil our graduates with just these qualities.

- Bachelor of Engineering (B.Eng.) and Master of Science (M.Sc.)
  Two internationally recognized degrees are available:
  three years bachelor course and two years master course.
- Theoretical and experimental physics combined with engineering methodology and applications.
- Physical focused mathematics
- Theoretical Physics is application orientated
- Field of specialisation selectable
  Biomedical Physics
  Laser & Optics
  Materials Science
  Renewable Energy
  Sound & Vibration
- Intensive instruction in small groups and self-sufficiently organised laboratory projects
- Excellent future perspectives, high demand for engineers
- International environment; 50/50 foreign and German students
- Language of instruction
  B.Eng. - During the first year all lectures will be given in English
  - German will be learnt in compulsory German language classes
  M.Sc. - Command of German and English required
- Costs: about EUR 600 per month for subsistence, approx. EUR 230 per semester enrolment fee (contains a ticket for the local transport), EUR 500 per semester tuition fees (scholarships are available).
Why come to study in Oldenburg/Emden, Germany?
The study course “Engineering Physics” offers anybody, who is interested in physics or medicine, a great opportunity for further studies. Furthermore the possibility to learn another language is especially valued. Studying in Germany is much cheaper compared to other countries like Great Britain or the USA. None the less you will receive first-class education in any subject.

What is so special about Oldenburg/Emden and the study courses?
The possibility to meet people from different countries and cultures while being able to develop ourself and study further at the same time makes these courses special. Further first-class lecturers and specialists are available, who are helpful and support willing students at all times. The program distinguishes itself not only through professional excellence, but also with a strong emphasis on intercultural exchange: half of the participants are from abroad.

Are there any language qualifications needed?
TOEFL internet based 83 points, or equivalent is required

B.Eng: No proof of German language proficiency is necessary for the Bachelor program. During the first year all lectures will be given in English. German will be learnt in compulsory German language classes. This will be a good preparation for attending advanced lectures, since some of them are given completely in German. Tutorials, exams, and the final thesis can be prepared in English or German.

M.Sc.: German is required for the Master of Science programme. The “Zertifikat Deutsch als Fremdsprache” (Zdf) of the Goethe-Institute or Testdaf TDN3 or an equivalent certificate is accepted as proof.

Costs?
This course is partly subsidized by the German Ministry for Education, Research and Technology, thus tuition fees are only EURO 500 per semester. International students can apply for a scholarship. An additional enrolment fee is approx. Euro 230 per semester and contains a ticket for the local transport. The student should calculate for subsistence costs of roughly Euro 600 per month.

Application period?
winter semester: May - October15th (Bachelor and Master)
summer semester: December 15th - February 15th (only Master)
Please visit our web site for the application procedure via uni assist http://www.physik.uni-oldenburg.de/EP/33906.html

When does the lecture period start?
winter semester: October - January
summer semester: April - July
The introduction weeks for international students starts in the beginning of October. Help for all administration things is provided. You will have much fun and many new friends.

What are the educational admission requirements?
Secondary School Leaving Certificate after 4 years of secondary school plus proof of the interuniversity university admission examination plus two or three years of successful university study in a field related to the intended field of study. In some cases proof of completion of the one-year pre-university education may also be required. Students at the Islamic Azad University must show proof of 4 years of university study or proof of 3 years of university study plus successful completion of the interuniversity Masters entrance exam plus proof of admission to a national university.

The Campuses
You enjoy fresh air and an intact environment? You don’t like wasting your hours commuting? You feel at home when you meet friends on the street? Then feel welcome to study here in the north west of Germany.
The campus of the Carl von Ossietzky University, Oldenburg, lies roughly 10 minutes by bicycle from the city centre and offers the 12,000 students modern lecture theatres and laboratories, two large libraries, a refectory and good sports facilities.
The Institute of Physics (http://www.physik.uni-oldenburg.de) comprises roughly 100 scientists and a total of 600 students plus 50 PhD students. In 17 sections and institutes, topics in theoretical, experimental and applied physics are researched, from black holes to bicycles. Oldenburg is a pleasant city of 155,000 inhabitants, with many historic sites, parks, pubs and an exciting cultural life.
The University of Applied Sciences, Fachhochschule Oldenburg/Ostfriesland/Wilhelmshaven, location Emden is situated in a port town on the north west coast, roughly 70 km from Oldenburg. Ostfriesland is a renowned holiday area, having a unique atmosphere with lush fields, windmills and red bricked houses, as well as a long tradition in shipbuilding and seafaring.
Five fields of specialization with promising career opportunities are offered:

**Specialization Biomedical Physics**

modern methods in medical radiation applications such as radiotherapy, nuclear medicine or radiology, audiology, basics of minimal invasive therapy including micro-mechanical, laser assisted methods as well as other imaging. The syllabus of the Master program is in accordance with the guidelines of the German Society for Physicists in Medicine (DGMP).

**Specialization Laser & Optics**

laser systems design, materials processing, medical applications, optical metrology, optical communication technology, and analytics.

**Specialization Materials Science**

treatment, understanding, and design of novel material structures, such as quantum dots, quantum wires, superlattices as well as of novel types of composite matter.

**Specialization Renewable Energy**

renewable energies, theoretical and real limits for their conversion and storage, as well as educate in physical and technical principles, concepts and in application of varying methods for the use of solar light and wind energy.

**Specialization Sound & Vibration**

infrasound, audible sound, ultrasound, structure born sound and vibrations. Topics address digital signal processing, basics of wave radiation and propagation, physical and technical properties of sensors and transducers, numerical calculation of vibrations, acoustic properties of matter, and evaluation of the impact of sound and vibrations on humans.

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