Discover the future of energy with the Energy Engineering program! Are you ready to be at the forefront of solutions for sustainable and affordable energy? The Energy Engineering program offers you the chance to explore the most important engineering topics in this field. The question of an environmentally compatible and affordable energy supply is one of the most important issues of the 21st century. The Energy Technology program deals with all engineering topics in this field. The basic scientific and engineering disciplines (e.g. mathematics, physics, construction), but also computer science (e.g. software and artificial intelligence) are taught. In addition, elements from process engineering, electrical engineering (e.g. processes in voltage networks) and materials engineering (e.g. which materials are used in energy technology) are relevant to energy technology. Graduates have a sound knowledge of all processes from the conversion of energy from the most sustainable sources possible to its consumption the study of energy technology is a very versatile engineering degree program.

Energietechnik

Bewerbung für zulassungsfreie Studiengänge #FAUtogether

The bachelor's degree program is divided into a foundation and orientation phase of two semesters and a bachelor's phase of four semesters.

Basics and orientation phase: 1st-2nd semester

In the first two semesters, competencies are acquired in basic subjects such as mathematics and physics. At the end of the second semester, a basic and orientation examination (GOP) must be passed. The GOP comprises the following seven modules worth 42.5 ECTS credits:

The GOP is passed when 30 ECTS points of it have been acquired. Bachelor phase: 3rd-6th semester

In the subsequent bachelor phase, the diverse aspects of energy technology are taught in the core subjects of regenerative energy systems, energy and drive technology, energy technology and chemical reaction technology, but also Machine Learning and Artificial Intelligence (see link). Furthermore, the area of soft skills is not neglected with the main seminar and a free elective. The bachelor phase consists of further compulsory modules, two compulsory elective module (selection from 11 modules), the bachelor thesis as well as a presentation of approx. 30 minutes on the topic worked on in the bachelor thesis with subsequent discussion. A further prerequisite for the completion of the Bachelor's degree is proof of six weeks of practical work experience.

Graduates receive the basic knowledge and experience required to independently and responsibly solve engineering tasks in the field of power engineering. In addition, the degree program incorporates, in a form appropriate to the level, knowledge acquired in ongoing top-level research, for example in the DFG clusters of excellence.

Short overview: Structure of the degree program

1st -2nd semester: Basics and orientation phase

3rd-5th semester: Subject-specific fundamentals and profile formation, various laboratory practicals, compulsory elective subject, free elective subject, industrial internship

6th semester: Bachelor's thesis, graduation

Basic requirements for the energy technology program are primarily: A steadily increasing demand for qualified energy technology engineers can be safely predicted. At present, these are sought throughout Germany, but also in particular in Erlangen and the "energy region" of Nuremberg. The potential field of activity is broad and includes, among other things 30.09.

The application deadline for the winter semester for international applicants is July 15th.

In addition to the general qualification for university entrance (Abitur), there are other access options for studying at FAU.

Our Student Advice and Career Service (IBZ) is the central point of contact for all questions about studying and starting a degree programme. Our Student Service Centres and subject advisors support you in planning your studies.

Degree: Bachelor of Science (B.Sc.) Duration of studies in semester: 6

Start of degree program: Winter semester

Study location: Erlangen Number of students: 150-250

Subject group: Engineering sciences

Special ways to study: 1-subject Bachelor Teaching language: completely in German

Admission Requirements: No Admissions Restrictions

 ${\tt Admission \ requirements \ (first \ semester): \ No \ Admissions \ Restrictions}$ 

Application deadline winter semester: 30.09.

German language skills for international applicants: DSH 2 or equivalent Details and notes: The application deadline for the winter semester for international applicants is July 15th.

In addition to the general qualification for university entrance (Abitur), there are other access options for studying at FAU.