In the degree program “Chemical Engineering – Sustainable Chemical Technologies” you will deepen your knowledge in the area of sustainability (including process synthesis and intensification, life cycle assessment, green chemistry and catalysis, renewable raw materials, energy, waste, recycling, toxicology, legislation, costs and overall assessment) and can choose two additional specializations according to your interests. Our program is international, research and practice-oriented and accredited!

Sustainability calls for social development that meets the needs of the present generations while keeping open the development options of future generations. The equal consideration of economic, ecological, societal and social objectives is a fundamental and decisive factor in this regard.

The degree program in Chemical Engineering – Sustainable Chemical Technologies (CEN) focuses on the use of material resources and their conversion while considering sustainability and thereby evaluating possible effects for future generations.

The four-semester Master’s degree program in CEN imparts advanced knowledge of process engineering. Current research topics from the field of “green technologies” are incorporated into the teaching.

2 Minuten Wissen - wie funktioniert ein Katalysator?

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In the Master’s degree program in Chemical Engineering – Sustainable Chemical Technologies (CEN), you acquire knowledge in the area of sustainability (including process synthesis and intensification, life cycle assessment, green chemistry and catalysis, renewable raw materials and resources, energy, waste, recycling, toxicology, legislation, costs and overall assessment) and can choose 2 additional specializations according to your own interests.

The following specializations are available:

Set your own focus through making your own choice of compulsory elective modules from a wide range of current, research-oriented topics such as chemical energy storage, clean combustion technology, energetic use of biomass and residues, fuel cells and electrolyzers or environmental process engineering.

The curriculum also includes two elective modules, a three-week project development course, a twelve-week industrial internship and the Master’s thesis (final semester).

Specialization in sustainability consisting of two compulsory modules (sustainability assessment and life cycle assessment) and four elective modules from a catalog with a wide range of options.

The Master of Science (M.Sc.) is an internationally recognized, scientific university degree that qualifies graduates for starting a profession. The Master’s degree in CEN qualifies for entry into a doctoral degree program as well as for various professional fields of activity:

Typical fields of application are in process analysis, process development and optimization, planning and design, and damage and incident analysis. For example, graduates can work in exciting projects like the design of wastewater treatment plants, at waste management companies or in innovative projects for recycling waste to generate electricity.

A semester at a foreign university is an important experience. It can be integrated into your curriculum and does not necessarily have to lead to an extension of the course duration, as flexible recognition of the achievements is possible. You can also take leave for a semester abroad.

As part of ERASMUS (mobility within Europe), you can spend a semester at one of the partner universities of the Department of CBI. Alternatively or additionally, you can use the cooperation of the Faculty of Engineering or FAU, for example to study at a university in Asia.
15.07.
15.01.
A subject-specific degree is a Bachelor’s degree completed according to the examination regulations or an equivalent degree that leads to a qualification equivalent to the Bachelor’s degree in Chemical Engineering – Sustainable Chemical Technologies completed according to the examination regulations. Applicants with a degree that differs from the degree specified in sentence 1 but is a related subject shall only be admitted to the Master’s degree program after passing an oral admission examination, see CEN study and examination regulations
Evidence of proficiency in German and English language equivalent to level B2 of the Common European Framework of Reference is required.
Applying for a Master’s degree
program: https://www.fau.eu/education/application-and-enrolment/
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: Master of Science
Duration of studies in semester: 4
Start of degree program: Summer semester, Winter semester
Study location: Erlangen
Number of students: 50-150
Subject group: Engineering sciences
Special ways to study: International degree program, Part-time degree program
Teaching language: German and English
Admission Requirements: Qualification assessment
Admission requirements (first semester): Qualification assessment
Application deadline winter semester: 15.07.
Application deadline summer semester: 15.01.
Content-related admission requirements: A subject-specific degree is a Bachelor’s degree completed according to the examination regulations or an equivalent degree that leads to a qualification equivalent to the Bachelor’s degree in Chemical Engineering – Sustainable Chemical Technologies completed according to the examination regulations. Applicants with a degree that differs from the degree specified in sentence 1 but is a related subject shall only be admitted to the Master’s degree program after passing an oral admission examination, see CEN study and examination regulations
General language skills: Evidence of proficiency in German and English language equivalent to level B2 of the Common European Framework of Reference is required.
Details and notes: Applying for a Master’s degree
program: https://www.fau.eu/education/application-and-enrolment/