The Bachelor’s and Master’s programme provides students with a comprehensive understanding in clean energy and clean energy processes. Today engineers are required to be able to work on questions of energy change and to find the necessary solutions for a sustainable future for the planet. Applications are in the field of energy technologies, energy systems, processes in industry and in consulting on these topics.

The unique course is interdisciplinary in its approach and integrates knowledge from other fields like business, ethics and sustainability. You will learn in an international and research-oriented environment with all courses being taught entirely in English.

CEP is a highly-selective, accredited 3-year Bachelor’s or 2-year Master’s programme.

In the Bachelor’s programme the students gain knowledge in:

- basic science (e.g. mathematics, physics)
- basic engineering (e.g. foundations of chemical reaction engineering, materials and structures, measurement systems)
- basic economics
- subject-specific basics (e.g. renewable energies, electrochemistry, fundamentals of energy resources)
- laboratory courses

As a graduate of CEP, you will be able to

- create climate-friendly energy
- address and work on answers for current and future questions about creating climate-friendly energy and creating sustainable processes in industry
- assess and incorporate socio-economic, ecological and legal factors

Cutting-edge research

Students will have the possibility to develop and obtain knowledge on cutting-edge research in energy processes done by the department of Chemical and Biological Engineering, the Helmholtz Institute for Renewable Energies (HIERN) and other relevant institutes situated at, or in close proximity to FAU (e.g. Energy Campus Nürnberg, Fraunhofer Institute for Integrated Circuits, Bavarian Centre for Applied Energy Research e.V.).
**Application and Admission:**

Bachelor’s degree:
1. Higher education entrance qualification
2. All applicants to the B.Sc. CEP have to pass a qualification assessment test (Eignungsfeststellungsverfahren)
3. Application deadline for winter term: 31st of May for Non-EU citizens, July 15th for EU citizens

Master’s degree:
1. Above average Bachelor’s degree in a similar study programme
2. Higher education entrance qualification
3. CV and application letter
4. All applicants are sifted in a pre-selection process
5. Application deadline for winter term: 31st of May for Non-EU citizens, July 15th for all other applicants

**Reasons for studying at FAU**

- Stimulating and inspiring scientific environment
- Job possibilities:
  - Energy production and logistics
  - Process optimization and intensification in any sector of industry
  - Sustainable bio- and/or chemical industry
  - Consulting and auditing
  - Policy and decision making
  - Master or Ph.D. in (sustainable) chemical and process engineering

**Programme**

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**Further Information**

The programme is designed to allow students to create an individually tailored curriculum with laboratory courses, elective modules and modules from both specialisations. Students will gain hands-on experience through laboratory courses and a mandatory internship that can be conducted either in industry or a research institution in Germany or abroad and make use of the numerous contacts of the programme to industry and academia preparing them for demanding tasks in engineering.

**Career Prospects**

Graduates of the programme stand out due to an extensive knowledge of innovative technologies for renewable new energy systems and energy production. They can significantly participate in the successful introduction of new sustainable energy systems and energy processes and adequately evaluate sustainability on a global scale. As they have more experience with international and research-related topics than other graduates, they are especially suited for tasks on the highest level of engineering or to pursue a career in academia. They will be the ones creating the change we need for tomorrow.

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**Course overview**

- Both the B.Sc. and the M.Sc. programme are entirely taught in English and prepare students not only to communicate on work-related topics in English but gives them the necessary vocabulary and international exposure to a truly international environment.

**Specialisations**

- Sustainable bio- and/or chemical industry
- Consulting and auditing
- Process optimization and intensification in any sector of industry
- Energy production and logistics
- Master or Ph.D. in (sustainable) chemical and process engineering