

Energy and Environmental Sciences: Admission with a HBO-diploma (Pre-master)

Prior education requirement

You cannot join the Master's programme immediately as you must first complete a Pre-master's programme, which starts in September. Once you have completed this programme, you can start your Master's programme in September of the next academic year.

Admission to the Pre-master's programme (of max 60 ECTS) is granted on an individual basis by the Admissions Board on the basis of the documents you supply. The following types of qualifications from a university of applied sciences are usually sufficient:

- Chemical Engineering
- Chemistry
- Environmental Sciences
- Mechanical Engineering
- Other natural sciences and related engineering studies

Other qualifications from a university of applied sciences are usually not considered sufficient for admission to a Pre-master's programme.

Content Pre-master's programme

The Pre-master's programme is a tough programme for students from a university of applied sciences and can be seen as an entrance examination in itself. You must complete the programme within one academic year, which in practical terms, means that you only have two chances to sit each exam; if you fail a particular exam twice, you will not be admitted to the Master's programme and will be expected to stop. If you pass all the course units in your Pre-master's programme, you must also satisfy the English language requirement before you can be admitted to the two-year Master's degree programme. We have learned from experience that students who pass the Pre-master's programme also go on to pass the Master's programme.

Please note: It is a good idea to think long and hard about your ambitions and whether the Pre-master's and Master's programmes will help you to achieve them. The Pre-master's programme is tough for all students and not all of them are able to complete it. Studying at a university is a very different experience from studying at a university of applied sciences. You must be motivated to invest about 10 months in serious studying, and reserve sufficient hours per week. We advise students to start preparing for the programme in the summer holidays by doing some self-study, for example. Having said this, an above-average, well-motivated university of applied sciences student will normally manage to complete the Pre-master's programme successfully.

To give you an idea, the pre-Master programmes of 45 ECTS are usually composed of the following course units (detailed course unit descriptions are available on [Ocasys](#)). The content of the programme can be adjusted each year, for example because of changes in curricula or time tables.

Start in September:

- Calculus 1 for IEM (period 1a)
- Physical Geography (1a)
- Solar Cells (1b)

- Introduction to Energy and Environment (1b)
- Geo-Energy (1b)
- Energy from Gas (2a)
- Physics, Astronomy & Society: Ethical & Professional Aspects (2a)
- Climate System and Atmosphere (2b)
- Paper Energy (2a or 2b)

Please note: the programme above is meant as an example, to give you a good idea of what to expect in practice. Depending on knowledge and skills may be introduced to this programme for every individual case.