Duration	One semester (30 ECTS)
Course period	Spring Term (March - July)
Location	Campus Emden
Language of instruction	English
Admission requirements	Only suitable for students from technical bachelor degrees, e.g. mechanical engineering, electrical engineering, industrial engineering, environmental engineering, etc. The maximum number of international students that can be admitted to the program is 15.
Application deadline	for the Spring Term is 30 <sup>th</sup> November.  If you are staying the complete academic year and wish to do this program in the spring term, the application deadline is 31 <sup>st</sup> May.
Tuition fees	Exchange students from partner universities do not need to pay tuition fees.

Do you want to know more?

For details about the program:

Prof. Dr. Iván Herráez

» ivan.herraez@hs-emden-leer.de



For questions about the nomination and application process:

Vera von Hunolstein

» vera.von.hunolstein@hs-emden-leer.de



for Erasmus+/Exchange Students (30 ECTS)





## Gain the expertise for shaping the future of the energy transition

Would you like to become an expert in the field of renewable energy? Are you interested in applying the theoretical knowledge that you have gained during the first years of your studies for developing the technology required for a sustainable energy transition?

If so, this exchange program is exactly made for you.

How to design a wind turbine? How to optimize the performance of a photovoltaic system? How to use solar thermal energy and heat pumps for covering the thermal energy demand of a building? How to implement energy efficiency measures for reducing the energy demand? And how to cover the demand by means of sustainable, interconnected energy systems? In the exchange program "Renewable Energy" you will learn the answers to all these questions and will gain an insight into current research and development projects in this area.

## The concept of the exchange program

The exchange program is fully taught in English by experts in the field of renewable energy. You will study with German and international students from different technical backgrounds. You do not need to deal with organizational issues, since the program has been planned in such a way, that the courses are not overbooked and there are no timetable collisions. The program does not only consist of lectures, but also of laboratory courses, technical projects and excursions. In the lectures, you will gain the scientific fundamentals of renewable energies. In the labs, you apply the knowledge from the lectures for performing and analyzing real life experiments. In the technical projects, you can focus on the technologies you are more interested in and implement your own ideas for developing sustainable energy systems. In the excursions and field trips, we visit companies from the field of renewable energies to gain insight into how the industry is working on the sustainable technologies that will shape the future.

## Courses

Wind turbines	3 ECTS
<ul><li>Solar thermal energy</li></ul>	2,5 ECTS
Photovoltaics	2,5 ECTS
Laboratory course wind energy	2 ECTS
<ul><li>Laboratory course solar energy</li></ul>	2 ECTS
Sustainable energy generation	3 ECTS
Process modelling and energy optimization	3 ECTS
Thermal power plants	5 ECTS
<ul> <li>Sustainable energy project</li> </ul>	7 ECTS

After successfully completing the program, you will receive the "Renewable Energy" certificate from the University of Applied Sciences Emden/Leer, documenting your expertise in this field.