

# Sustainability—Basis for successful studies

The three SENCE partner universities and other associated universities in Baden-Württemberg package their teaching and research competencies in this study programme. This enables the students to intensively study renewable energy and to deal with a broad subject range. The aim of this future oriented degree is sustainable management in relation to the utilisation of natural resources.

## University of Applied Sciences Stuttgart

- Competence centre for sustainable energy technology -
- Energy efficient buildings and communities, renewable provisioning

## University of Applied Forest Sciences Rottenburg

- Competence centre for biomass -
- Production and energetic utilisation of biomass

## University of Applied Sciences Ulm

- Competence centre for energy systems technology -
- Renewable energies

## Partner Universities



### Hochschule für Technik Stuttgart

University of Applied Sciences

University of Applied Sciences Stuttgart  
Schellingstr. 24  
70174 Stuttgart  
[www.hft-stuttgart.de](http://www.hft-stuttgart.de)  
[sence@hft-stuttgart.de](mailto:sence@hft-stuttgart.de)



University of Applied Forest Sciences Rottenburg  
Schadenweilerhof  
72108 Rottenburg  
[www.hs-rottenburg.de](http://www.hs-rottenburg.de)  
[sence@hs-rottenburg.de](mailto:sence@hs-rottenburg.de)



University of Applied Sciences Ulm  
Prittwitzstraße 10  
89075 Ulm  
[www.hs-ulm.de](http://www.hs-ulm.de)  
[produktionstechnik@hs-ulm.de](mailto:produktionstechnik@hs-ulm.de)

Admission only applies for the Winter Semester  
Application deadline:  
1st June (for non-EU citizens: 15th April)  
Admission is possible at all three universities.



University of Applied Forest Sciences  
Rottenburg  
University of Applied Sciences

## SENCE

Sustainable Energy Management and Technology

### Master of Science



## Description of the Degree

### Current Situation

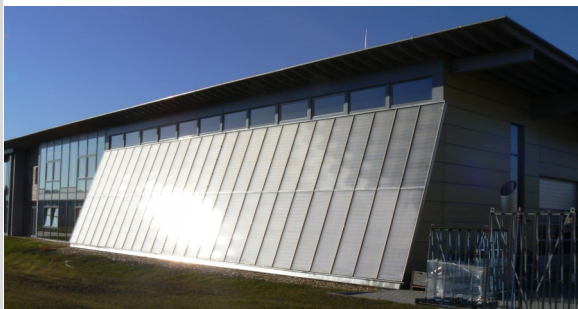
The availability of oil and natural gas is only limited. Protecting the climate demands a drastic reduction of CO<sub>2</sub> emissions. Meanwhile, there is central economic, energy and environmental political consensus to strengthen the utilisation of renewable energy. Therefore, since 2002 the universities of applied sciences Stuttgart, Rottenburg and Ulm have offered the master course SENCE.

### Theory and Practice

SENCE stands for Sustainable Energy Competence and covers the theory as well as the practical application of regenerative energy for the production of heat and electricity with solar energy, hydro- and wind power as well as from biomass as renewable energy sources.

### Innovative and Practice Oriented

Within four semesters the students acquire scientific competence for planning, implementing and the operation of installations for renewable energy generation and usage. Through the research and project oriented structure of the degree, the students gain a practice based education and the possibility to expand their know-how in this future oriented field and to set their own main focuses.



## Study Content

### Academic Studies

SENCE is based on the foundations of three equally important teaching disciplines: natural sciences, technical sciences, as well as economic and social sciences. These are found over again in the different phases and modules of the course. In the course special focus in the course is on the individually carried out projects and research. These are conducted by the students at the cooperating applied universities or in private enterprises.

### Project Phase

In the second semester, each student completes two projects. As well as project themes on offer from the participating applied universities which can be carried out in the university laboratories, there are projects designed in collaboration with companies in private industry. The approach and the results are documented in a report and presented to the other students.

### Master Thesis

The course ends with a written master thesis and presentation done in the fourth semester.



## Career Perspectives

### Structure of the Masters Degree SENCE

Sustainable Management - Resources Scientific Work and Project Management Sustainable Energy Technology - Industrial Systems Sustainable Energy Technology - Building Systems	Semester 1
Project Phase (two scientific projects each 8 - 12 weeks working time)	Semester 2
Sustainable Energy Management Business Seminar Development of a research project (DFG/EU) Mathematical scientific modelling	Semester 3
Master Thesis (6 months duration)	Semester 4
Master of Science (M.Sc.) Sustainable Energy Competence	Degree

### Career Perspectives and Occupational Areas

The graduates of the masters degree are experts in the planning and implementation of contemporary energy concepts. With this, they can be valuable decision makers in companies and municipalities. Potential employers in particular are manufacturers of energy products and facilities, companies with energy intensive production and energy utility companies or engineering companies.

