



# RENEWABLE ENERGIES

Bachelor of Science



Hochschule für Forstwirtschaft  
Rottenburg  
University of Applied Sciences

*Real close. Far ahead.*



„EXZELLENZHOCHSCHULE“  
Stifterverband  
für die Deutsche Wissenschaft

5x OFFIZIELLES  
PROJEKT DER  
WELTDEKADE  
2006 - 2014

# Learning for the needs of tomorrow!

With nearly 1,100 students, the University of Applied Forest Sciences (HFR) is a small but future-oriented University of Applied Sciences. The curricula are based on employment-related fields of the future.

In its courses, the university develops cross-sectoral solutions in the fields of forest management, timber industry, nature and environmental protection, landscape planning, water management, sustainable regional management, resource-efficient building and renewable energies. These programmes focus on transferring knowledge and skills for the material and energetic use of renewable resources and responsible use of scarce resources.

Graduates have excellent employment prospects.

The HFR was awarded UNESCO prizes every year from 2006 to 2014 for their forward looking educational offer. It is thus one of 16 institutions from over 1,800 award-winning projects. It also won the university competition "Excellence strategies", organised for small and medium universities by the German science foundation.

## Sustainability as a theme

Within the country, HFR is among the universities with the clearest training and research profiles due to its consistent orientation of all programs towards the principle of sustainability. It prepares the students for their professional career with a comprehensive academic education (key skills and expertise).

As a result, the application-oriented combination of research and teaching forms a solid unit. HFR offers 5 Bachelor's and 3 Master's programmes.

The university maintains close contacts with numerous partner universities in many European countries and worldwide. These collaborations primarily serve international student exchange.

The clear layout of the university and its historic campus ensures a familial atmosphere and short walking distances. This allows students to be advised individually, which significantly contributes to more pleasant and effective studies. The location surrounded by forest and orchards offers many opportunities for outdoor teaching events.



*“With us, knowledge and expertise on sustainability is acquired through individual studying.”*

PROFESSOR DR. DR. H.C. BASTIAN KAISER, RECTOR



“A university education for the future”



## Study renewable energies. Make the topic of the future your own.

Mitigating climate change is the greatest challenge for the present and the future. Its ecological, economic and political consequences directly jeopardise our livelihood. A drastic reduction of the use of fossil fuels within the next few years is thus indispensable. This is only achievable through energy savings, a significant increase in energy efficiency and the coverage of the remaining energy needs with renewable energy sources such as solar, hydro, wind and biomass.

The contribution of renewable energies to a climate-friendly and reliable energy supply is becoming increasingly important.

Due to the withdrawal from a nuclear power and coal-based power generation, decentralised production of electricity and heat from renewable energy sources continues to gain significance. Therefore electricity networks must be modernised and expanded, and storage capacities provided for excess energy.

This development is increasingly becoming the focus of the energy sector. Specialists in the field of renewable energies are urgently required for this purpose.



### A unique programme!

In 7 semesters, wide natural-scientific, technical engineering and economic knowledge is taught. These include in-depth knowledge in the areas of energy and plant engineering, energy economics, energy law and biomass processing and logistics.

Moreover, the importance of social skills and social responsibility is transmitted.

After broad-based basic studies, in the third semester there is a choice of specialisation. By opting for “Energy Systems Technology” or “Raw Materials and Plant Management” knowledge is focussed and deepened. The foundations are thus laid for a sound, qualified career in the professional field of renewable energies.



## Relevant for practice. Close to nature.

The diversity of the Renewable Energies programme is reflected in a wide range of extremely diverse subjects.

Everything is included, from analytical tasks in the laboratory on configuring systems to practical exercises in the university's own teaching garden. But in-depth knowledge is also imparted in electrical engineering and the energy sector. It certainly will not hurt to contribute solid mathematical and physical basic knowledge.

In all this the HFR pays particular emphasis on high practical relevance. Numerous excursions and field exercises provide insights into future career fields.

Project work and group projects go beyond the subject content to transfer social skills that are essential for the profession. The inclusion of teaching staff who come directly from professional practice, as well as the professional experience of all teaching staff, guarantee sound practical relevance.

In particular, the integrated practical semester offers the opportunity to experience everyday work in future professional fields and apply the acquired knowledge in practice. Students can make initial contact with future employers or find topics for Bachelor theses.



## Programme overview

1 <sup>st</sup> sem.	<b>BASIC PROGRAMME</b> Science, engineering and economic fundamentals
2 <sup>nd</sup> sem.	insights into conventional and renewable energy, as well as in the use of biomass
3 <sup>rd</sup> sem.	<b>MAIN PROGRAMME PART 1</b> Choice of specialisations:
4 <sup>th</sup> sem.	“Energy Systems Technology” or “Raw Materials and Plant Management”
5 <sup>th</sup> sem.	<b>INTERNSHIP</b>
6 <sup>th</sup> sem.	<b>MAIN PROGRAMME PART 2</b> Bachelor thesis
7 <sup>th</sup> sem.	<b>BACHELOR OF SCIENCE (B.Sc.)</b>



“There are regular excursions offered for my course at Rottenburg. I really like that about my course of studies. This allows me to get direct insight into practice and better imagine my future career.”



## You have great development opportunities here. And great career prospects.

Sustainable use of natural resources is only possible with multidisciplinary approaches. Teaching social and methodology skills is thus a high priority.

Our students will be qualified by the programme to communicate competently and in a goal-oriented manner with professionals in a variety of disciplines, and to collaborate with them.

Studying Renewable Energies in Rottenburg therefore provides a broad education that allows entry into a wide variety of professional fields.

There is also the opportunity for our graduates to directly obtain further qualifications at the HFR through a Master's degree programme.

### Many work disciplines

Students on this programme will be trained for expert and managerial roles in the following fields:

- Energy agencies
- Towns and communities
- Manufacturers of renewable energy technology
- Regional and inter-regional energy suppliers
- Associations
- Architectural and engineering offices
- Business consultancies

# 10 REASONS

## for Renewable Energies in Rottenburg

Sophisticated teaching

High practical relevance

Individual advice

Personal atmosphere

Wide-ranging international contacts

High research intensity

State of the art lab equipment

Good career prospects

Great networking in the region

Affordable accommodation in Rottenburg



## Getting started

### Rottenburg - loveable and liveable

Buildings spanning styles from eight centuries make up the cityscape of the idyllic town on the Neckar river (e.g. medieval and gothic churches or baroque chapels).

A variety of traces dating right back to Roman times bear witness to an interesting past. At carnival time, things get a bit crazy in the city and every year there is a temptingly interesting range of cultural events offered.

Rottenburg offers attractive and affordable living space, with plenty of shopping opportunities and a good range of recreational activities.

Its location halfway between Stuttgart and Lake Constance, between the Black Forest and the Swabian Alb, as well as good transport links to the motorway make Rottenburg an ideal starting point for trips into the region, both close by and further afield.

The state capital is only 50 km away, and the university town of Tübingen is 12 km away. Both towns are easily accessible by train.

Further information on Rottenburg at: [www.rottenburg.de](http://www.rottenburg.de)

### Study programme information day

Twice a year, there is a programme information day at the university. Students and prospective students have the opportunity to attend lectures on the programmes, to participate in a tour of the campus and to talk to professors and students. The dates are on our website.

### Access to higher education

There are several ways leading to a degree at the University of Rottenburg: From the general university entrance exam to professional qualifications. For more information, consult our website.

### Application process

Programmes start in the winter semester. The deadline for applications is July 15<sup>th</sup> (late applications will not be accepted). The application can be filled out online starting in the middle of April each year. Detailed information can be found on our website.

To apply for a student place at any university in Baden-Württemberg, a certificate of participation in an orientation test is required. ([www.was-studiere-ich.de](http://www.was-studiere-ich.de))



In Rottenburg, it is easy to find a suitable room. There are plenty of shared student houses and affordable rooms in dormitories just minutes away from the university.

## Do you have any questions about the programme?



Professor Dr. rer. nat. Martin Brunotte  
Head of studies

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## Do you have any questions about applying?



Silke Lippert  
General student advice

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## Other programmes:

### Bachelor of Science

- Forest Management
- Sustainable Regional Management
- Wood Management and Technology
- Water Resource Management

### Master of Science

- Forest Management
- Resource-efficient Building
- SENCE (Sustainable Energy Competence)

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## University collaborations

UNIVERSITÄT HOHENHEIM



EBERHARD KARLS  
UNIVERSITÄT  
TÜBINGEN



Hochschule Ulm



University of  
Applied Sciences

**Hochschule Esslingen**  
University of Applied Sciences



**Hochschule  
für Technik  
Stuttgart**