TECHNOLOGY . BUSINESS . SOCIAL SCIENCES

Bachelor full-time / English

Bachelor of Engineering (B. Eng.)

E-MOBILITY AND GREEN ENERGY

HOCHSCHULE
RAVENSBURG-WEINGARTEN
UNIVERSITY
OF APPLIED SCIENCES

AT A GLANCE

Final Degree
Bachelor of Engineering
(B.Eng.)

Period of Study
7 semesters, including an internship, full-time

Closing Dates
15 November (Summer Term),
15 July (Summer Term)

Start
Summer Term (in English)
Winter Term (in German)

Admission Requirement
Higher education entrance qualification
or equivalent

ECTS
The course of study includes
210 Credits

Online-Bewerbung
www.rwu.de

Dean of studies
Prof. Dr. Markus Pfeil
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KNOWLEDGE & PRACTICAL SKILLS

Shape the future in the era of change. The energy revolution will lead to electricity from renewable sources such as wind, water and the sun.

You think strategically and act responsibly? You want to have secure future prospects and at the same time help protect the environment? You find technology fascinating and love creative and new paths. Then, the study program »E-Mobility and Green Energy« is what you are looking for.

We live in an era of change. Climate, demography, energy, consumption, mobility – everything is subject to fundamental changes. Urgently needed technological leaps and innovations as well as the challenges of environmental and climate protection are the main focus of discussion. The turnaround in energy policy leads us away from fossil fuels and nuclear energy towards clean electricity from renewable energies such as wind, water and the sun.

Here, engineers are needed who shape this change by developing innovative »green« technologies.

STUDY PROGRAM & CURRICULUM CONTENT

A complete conversion to e-vehicles would reduce the energy requirements of passenger cars by 75 percent. This electricity requirement could be completely covered by wind energy.

As a university of applied sciences, our focus is on practice. Laboratories and an electric vehicle are available for experiments and research projects.

During the basic study period (first three semesters), students will learn the basic principles of electrical and automotive engineering. After that, in the main study period (three semesters), they will opt for one of the two areas of concentration, i.e. electromobility or green energies and deepen their knowledge by choosing suitable electives.

The fifth semester is a practical semester. The students will work in a regional company on current projects.

The program is also offered in German, starting in the winter semester.

Students graduate from this study program after seven semesters with the internationally recognized Bachelor of Engineering (B.Eng.) degree.

The lectures of the first four semesters are held in English, whereas in the sixth and seventh semesters, the medium of instruction is German.

For students starting in the winter semester all courses are taught in German.

SEM.	MODULE OVERVIEW						ECTS
1	Electrical Engineering 1: Basics 5	Mathematics 1: Analysis 1 5	Mathematics 2: Linear Algebra 5	Programming & practical course 5	Digital Technology & practical course 5	Physics Mechanics 5	30
2	Electrical Engineering 2: Electrodynamics 5	Metrology 1: Basics & practical course 5	Mathematics 3: Analysis 2 5	Automotive Engineering 5	Material Science 5	Computer Aided Circuit Design 1 & practical course 5	30
3	Electrical Engineering 3: Time and Frequency Domains 5	Robotics & practical course 5	Electrical Engineering Practical 5	Electronics 5	Automotive Engineering: Practical and Computer Aided Design (CAD) 5	Machinery Design 5	30
4	Profile 1: Study Focus 5	German Language 5	Power Electronics 5	Seminar: Main Study 5	Introduction to Power Train Engineering 5	Elective Module 5	30
5	Internship						30
6	Digital Signal Processing & practical course 5	Seminar: Scientific Work 5	Microcontroller & practical course 5	Real-Time Programming & practical course 5	Profile 2: Study Focus 5	Profile 3: Study Focus 5	30
7	Green Energies und Energy Storage & practical course 7	Control Engineering & practical course 6	Image Processing & practical course 5	Bachelor-Thesis 12			30

Lecture subjects · Projects and practical courses · Thesis and internship

JOBS & PROSPECTIVES

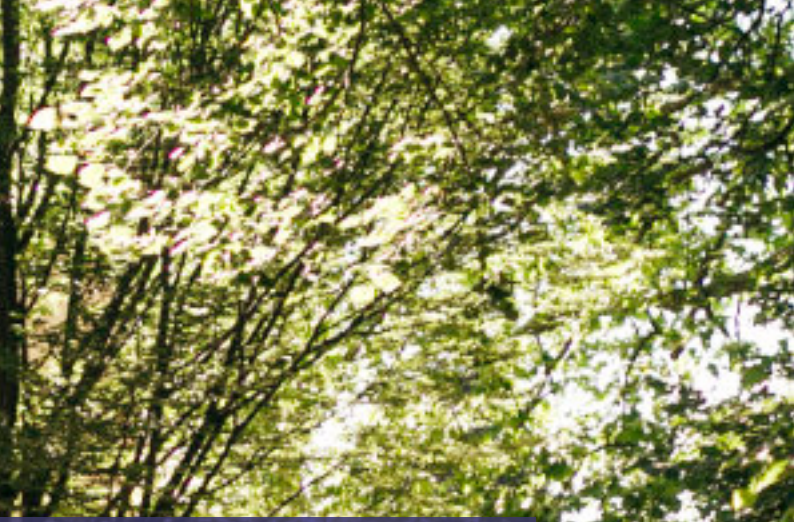
The latest laboratory building of the RWU (below) was completely dedicated to the topic of e-mobility.

People's need to be mobile is elementary and unabated. As an engineer of electromobility, it is your task to technically implement the idea of environmental protection also in the field of mobility. Rising energy costs, scarcer resources and environmental concerns prompt us to rethink our mobility concepts; new ones are therefore needed!

Electric powertrains, autonomous vehicles and smart grids will dramatically transform automotive engineering and traffic in the future. Engineers make use of these technologies in electromobility and the renewable energies to technically improve electric cars in such way that they can be used economically, comprehensively, reliably and safely. This includes the provision of the energy required by exploiting the multiple environmentally friendly sources of green energies.

STUDIES AT RWU

The studies at the Ravensburg-Weingarten University of Applied Sciences are characterised by practical training and modern, well-equipped laboratories. Students study in small groups, individually supervised by a team of highly qualified professors and assistants. Nearby dormitories and many leisure activities in the attractive landscape of Upper Swabia, close to Lake Constance and the Alps offer excellent boundary conditions and the best conditions for fun and success in study and work.



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HfSW
Hochschulföderation
SüdWest

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