



Hochschule
Ravensburg-Weingarten

Technik | Wirtschaft | Sozialwesen



Physical Engineering

Bachelor of Science

physics.campus-weingarten.de

Engineering

is the creative application of science [...] to the innovation, design, construction, operation and maintenance of structures, machines, materials and devices...! That's what Wikipedia would like to tell you about this subject...

Engineering can be done close to a product, like mechanical and electrical engineers are doing it or it can be done close to science and research!

You are

- interested in science and technology,
- looking for a special kind of study,
- not afraid of mathematics and physics
- looking forward to become an inventor,
- someone who can get the whole picture, handle complicated systems and find solutions ...?

We are

- working with the latest and very latest scientific results and we're the ones who apply them first of all,
- not going to optimize products but we realize prototypes and scientific instruments
- tightly connected to research, closing the gap between science and technology
- inventing tomorrow's gadgets, devices and items—right now!

Prospectives

The Region

Most of our graduates get a great, challenging and fascinating job in the region of Bodensee-Oberschwaben. This may look like a rural and boring place from a distance, but there are lots of small and medium sized companies around which are — nevertheless or even therefore — on the leading edge of technology!

Swabian inventive genius has got its home right here! Just look for „Hidden Champions“.

Unemployment rates are negligible. These companies are desperately seeking young, qualified and motivated people.

Master's Degree

Some students decide to go on with their studies, heading for a Master's degree. Either still in Weingarten (Mechatronics and TM&O Research and Development) or somewhere else in Germany.

Since you will get an excellent education in physics and mathematics, even university based courses as well as (later on!) PhD programs are within reach.



Course of Study

Introductory Studies

Physical Engineering starts with the basics—with an introductory study period which takes three semesters. You will get the opportunity to enhance your German language skills in a special course related training offer. A basic level of German (A1) is required and indispensable in the beginning. A B2 level has to be reached during the introductory studies.

Advanced Studies

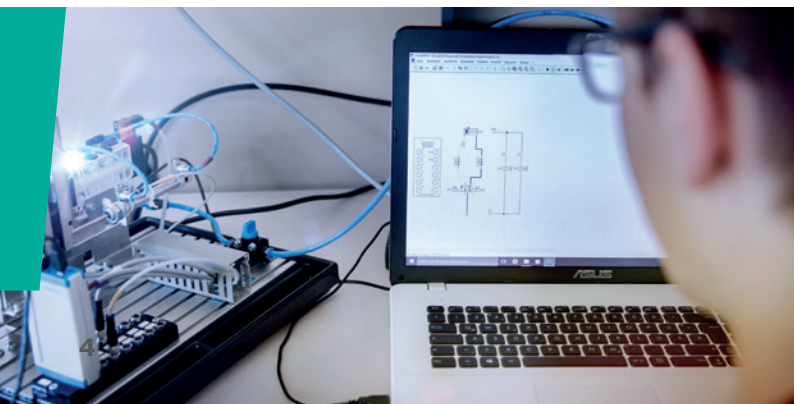
After that, things will be different: you will join native German students for the advanced courses, being held in German. Lectures will be replaced more and more by laboratory and practical training. Contents will change from theoretical background to applications and technology.

Internship

In your sixth semester, there will be an obligatory internship. This can either be done at a company or in a research institute.

Bachelor Thesis

Your study will end with a Bachelor Thesis. Most of the students are doing it outside of the university.



Contents

Introductory	<ul style="list-style-type: none">• Mathematics Algebra and Calculus• Physics Mechanics, Electrodynamics, Optics, Waves, Lab.• Intr. to Electrical Engineering Electro-Technics, Electronics, Lab.• Intr. to Computer Sciences Computer Sciences and Programming• Intr. to Mechanical Engineering Engineering Design• Chemistry and Materials Science
Advanced	<ul style="list-style-type: none">• Sensors and Measurement Tech.• Simulation• Control Theory• Microcontrollers• Digital Technologies• Business Administration• Development Technical Documentation, Project Mgmt., Patents
Specialization¹	<ul style="list-style-type: none">• Mechatronics Robotics, Mechatronics, Microsystems, Optoelectronics• Optics Imaging, Spectroscopy, Machine Vision, Image Processing

¹Within the advanced studies you can choose between two specializations, both covering up-to-date technology.

Ravensburg-Weingarten University of Applied Sciences

“Rural Base—Global Face”: this is the slogan of the Ravensburg-Weingarten University of Applied Sciences. The proportion of international students coming from all over the world amounts to 10% which is a quite high rate compared to other universities of applied sciences.

Lectures and seminars in small groups ensure intensive support, focusing on project-oriented knowledge acquisition. The students get practical experience in laboratory tutorials, in an obligatory internship in the industry and an application-oriented final thesis. Due to the close contact to the global companies in Bodensee-Oberschwaben, our students are perfectly prepared to enter their professional lives.

Asian Representative (India)

Let's bridge IT

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At a glance: Physical Engineering



Final Degree

Bachelor of Science (B.Sc.)

Prescribed Period of Study

7 semesters including a research or an industrial internship, full-time

Start

Summer Term (in English)

Winter Term (in German)

Closing Dates

15 November (Summer Term)

15 July (Winter Term)

Admission Requirement

Higher education entrance qualification or equivalent

ECTS

The Course of Study totals 210 Credits.

Application

www.hs-weingarten.de

Further Information

Studierenden-Service

Hochschule Ravensburg-Weingarten

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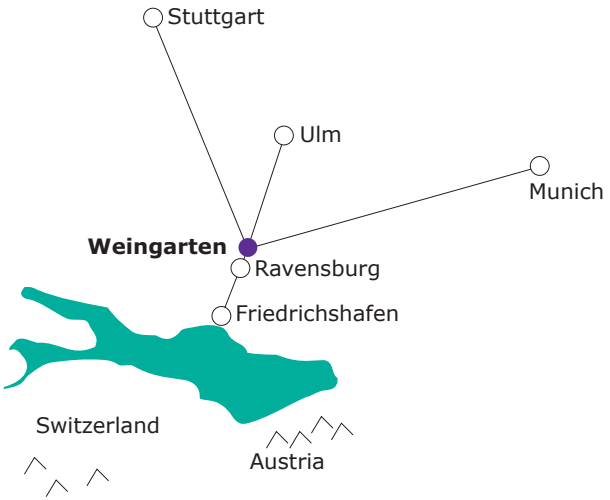
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