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Hochschule Konstanz
University of Applied Sciences

Sustainable Engineering and Future Technologies

Bachelor of Engineering (B. Eng.)



Areas of Specialization:

- Energy Science and Technology
- Sustainable Mobility
- Environmental Engineering
- Data Based Engineering
- Robotics and Cyberphysical Systems

Well prepared for **Current and Future** Challenges!

This interdisciplinary program equips you with a strong foundation in mechanical and electrical engineering, enabling you to design and develop innovative, energy-efficient, and sustainable solutions – from renewable energy and smart grids to e-mobility and intelligent machinery.

Best Opportunities: The demand for sustainable technologies is growing worldwide. With its interdisciplinary approach across mechanical and electrical engineering, the SET study program equips you with exactly the skills industry and start-ups are seeking. As a University of Applied Sciences, HTWG combines academic depth with strong practical training, including a mandatory internship semester and projects with companies like Bosch, Daimler, or ZF. This international program opens diverse career paths in Germany, Europe, and beyond.

Your Skills: You will thrive in this program if you are curious about technical systems and motivated to shape a sustainable future. Strong problem-solving skills, analytical thinking, and enjoyment of working in international teams are key. Courses are mainly taught in

LANGUAGE OF INSTRUCTION mostly English, German modules in higher semesters
PROGRAM TYPE Full-time
LENGTH OF STUDIES 7 semesters
STANDARD CLASS SIZE 40
accredited degree program

English in the first semesters, with German language classes supporting your integration and career prospects.

Areas of Specialization: For your fifth semester you have the possibility to choose one out of five completely different but evenly interesting modules to specialize your knowledge in:

- Energy Science and Technology
- Sustainable Mobility
- Environmental Engineering
- Data Based Engineering
- Robotics and Cyberphysical Systems

This is the perfect opportunity to pave the way for your future career and have insights into the scientific working methods used to find solutions for modern problems.

Module overview

SEM. 1	Language Basics DE Machine Design and CAD Mathematics 1 Electrical Engineering Basic Concepts of Sustainability Hand-On Experience DE/EN
SEM. 2	Physics Technical Mechanics Mathematics 2 Programming DE/EN Electronics Intercultural Competences DE
SEM. 3	Process and Material Technologies Machine Dynamics Signals and Systems DE Mathematics 3 Microprocessor Systems Lab Project DE
SEM. 4	Internship (Integrated Practical Semester)
SEM. 5	Specialization Modules DE/EN Control Systems DE Software Engineering + Object Oriented Programming Sensors and Drives Fluid Dynamics and Thermodynamics DE
SEM. 6	Project and Quality Management Compulsary Elective Modules
SEM. 7	Project Scientific Writing DE General Studies Bachelor's Thesis

Legend: **Foundation studies** | **Main studies** | **DE** = taught in German, **DE/EN** = taught in German/English
Scope of academic achievement for this program: 210 ECTS / credit points (30 ECTS per semester)

Would you like to find out more about the subjects? You can obtain a detailed graphic of the study structure with the scope of the respective subjects via the QR code. The study structure and the study and examination regulations can also be found at: www.htwg-konstanz.de/en/set



HANDS-ON LEARNING:

Where Knowledge meets Practice

A defining strength of HTWG lies in its robust **integration with industry**. During the fourth semester, students undertake a practical internship within companies, acquiring hands-on professional experience and establishing valuable networks. These strategic partnerships enable the university

to sustain close collaborations with a wide range of regional and international enterprises. Moreover, HTWG boasts **extensive international affiliations with over 80 partner universities worldwide**, fostering student mobility, academic exchanges, and collaborative research initiatives.

The program combines a **variety of different engineering disciplines** and gives students the tools to enhance their vision for a more sustainable future and rethink the current technology.



Hannes Beck, Germany

4th semester

My experience with the SET program has been a very positive one so far. We **study in small groups** and you can always ask questions. Even if the studying amount is rather big at times, it is still manageable. I highly recommend this program to anyone who is interested in the SET field.



Kryzelle Manabat, Philippines

2nd semester

Your Perspective

After you finished your degree, great opportunities are at your disposal, with the HTWG having strong industry links to big international companies that are stationed in the region, like Bosch, Daimler and many more.

A Future in Germany

International students who finished their Bachelor's degree have the opportunity to stay in Germany for 18 months after graduation to look for employment.

Master's Programs

After completion of your bachelor's degree you are eligible to pursue a master's degree at the HTWG which offers a wide range of programs to dive even deeper into your field of choice.

Possible career fields (examples)

Development of

- Mechatronic systems
- Cyber-physical systems
- Sustainable mobility solutions
- Renewable energy systems
- Software/hardware

- Data analysis
- Project management





One Campus. The Lake. Your Vision.

The HTWG Konstanz – University of Applied Sciences provides a diverse and interdisciplinary learning environment for around 4,500 graduates / undergraduates. Students study in small groups and receive **close support from professors and staff**. Versatile laboratories such as the **Open Innovation Lab** provide access to cutting-edge technology, including VR, 3D printers, laser cutters and CNC machines. Konstanz, Germany, combines the charm of a small, safe university town with the opportunities of a dynamic, international student community. Studying at Lake Constance means learning in **one of Europe's most beautiful regions**, right on the border with Switzerland and close to Austria and France. Whether you enjoy sailing, skiing, hiking or exploring Europe, you will find inspiration and balance here to help you become the best version of yourself. **More about us:** www.htwg-konstanz.de/en

Applications / Admission

Application deadlines:

for winter semester → June 1st

for summer semester → November 1st

For further info

→ see Statutes on Admission

Information about the application process:

www.htwg-konstanz.de/en/set

→ International applicants

Admission requirements:

one of the following:

→ University entrance qualification

→ International applicants:
recognition needed, for detailed
information look at our website

Language Requirements:

B2 level English skills
(A2 German skills highly
recommended)

Photos: Philipp Uricher, loveleygiants
v3 – 11/2025 (bf)

Do you have any questions...?

→ about our study program:

SET Team

e-Mail set-international@htwg-konstanz.de

→ about general guidance, applications,
visa, housing or any other questions:

International Office

e-Mail internationals@htwg-konstanz.de

→ about admission/administration:

Central Administration

e-Mail set-administration@htwg-konstanz.de

Insight: Study projects / Campus life



[instagram.com/set_htwg_konstanz](https://www.instagram.com/set_htwg_konstanz)



[youtube.com/hochschuleKonstanz](https://www.youtube.com/hochschuleKonstanz)



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[linkedin.com/school/htwg-konstanz](https://www.linkedin.com/school/htwg-konstanz)

Hochschule Konstanz

University of Applied Sciences
Alfred-Wachtel-Straße 8
78462 Konstanz, Germany



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this flyer is printed on climate-neutral recycled paper
(certified with the "Blauer Engel" eco-label).



**Detailed information on
the degree program
and other contacts:**

www.htwg-konstanz.de/en/set