

# Sustainable Water Management and Engineering (M.Eng.)

Master's Program Engineering Department





University of Applied Sciences

## Sustainable Water Management and Engineering - What is it all about?

Climate change and a growing world population are only two of many reasons why the requirements for a sustainable and resilient water management are getting ever more complex. New challenges and qualification requirements arise for engineers who today have to be managers as well.

The new Master's program Sustainable Water Management and Engineering (M.Eng.) is designed to meet these challenges and to qualify a new generation of engineers.

The program focuses on imparting key competences in management and engineering, flanked by sustainability and digitalization. Based on the latest research in these specialist topics, students train their systematic thinking and communication skills.



# What do I gain with this M.Eng.?

#### With this Master's program, you will be able to

- \_ identify and analyze current and future challenges in water management,
- \_ develop appropriate solutions, and
- \_ implement and evaluate them in interdisciplinary teams.

#### In addition, you benefit from

- \_ a unique Master's degree at the interface of technology and management,
- \_ a perfect interdisciplinary toolbox of knowledge and skills of engineering and business know-how,
- \_ development of your intercultural competence, and
- \_ excellent career perspectives.



Further information is available on www.hof-university.de



## Fast facts



#### Degree awarded

Master of Engineering (M.Eng.)



#### Duration

3 semesters (including Master's thesis)



#### Language of instruction Fully taught in English



#### Internship

Mandatory internship in industry or in a research institute (semester 3)



#### **Tuiton fees**

No tuition fees; just an administrative fee of approx. € 125 per semester



#### Services and support for international students

- organisational support before and during your studies at Hof University
- \_ assistance in finding accommodation
- \_ Orientation Week prior to the start of your studies
- \_ social integration
- career-promoting activities such as intercultural trainings, field trips, and company visits
- \_ free public transportation in the city of Hof

## Special features

#### **Practical Internship**

Our M.Eng. students spend the third semester doing a practical internship in industry (e.g. manufacturer of equipment for wastewater treatment plants) or in engineering offices (e.g. planning of remote-controlled sewers or urban rainwater management). The Master thesis is also written during the internship. Thus, you can immediately apply your knowledge and gain profound professional experience at the same time.

#### **Teaching concept**

The Master's program is based on a hands-on, interdisciplinary concept. Current topics such as sustainability, water risk management and water resource management are combined with classic technologies such as water treatment and water circulation. Above all, the three dimensions of sustainability are considered: the economic efficiency, social responsibility and environmental compatibility.

Theory and hands-on training are closely linked, e.g. in group projects at partner companies. Study excursions to pioneering water management facilities and discussions with experts from research and industry are an important part of the Master's program.



## What do I need to bring?

#### Academic requirements

- Bachelor's degree or equivalent in engineering or natural sciences providing sufficient knowledge in environmental engineering, water technology and chemistry from an accredited university, minimum 210 ECTS or equivalent (depending on home country); minimum grade 2,5 according to the German grading system
- \_ Sufficient knowledge in environmental engineering, water technology and chemistry means that at least 5 credits (or their equivalent) have been earned in each of these areas.
- \_ Applicants with less than 210 credits (ECTS) will be accepted but have to gain the missing credits by either
  - \_ completing an internship (at least 20 weeks) as long as no internship was done during the Bachelor's degree.
  - Attending appropriate modules at Hof University (for applicants who already completed an internship).
  - For both alternatives, please calculate an additional (fourth) semester.

#### Language requirements

You need to prove your **proficiency in English**. This can be done with either of the following:

\_ TOEFL minimum 90

\_ IELTS 6.5 or above

In addition: **Basic language skills in German**, proven by official test score documents - **minimum level A1** 

## Timeline

#### **Online application**

You register in our online portal Primuss and fill in the application form with your personal details. If you acquired your university entrance certificate abroad, <u>uni-assist</u> must assess the certificate before you can send it to Hof University. We advise you to send your documents to uni-assist **at least 4 weeks before our application deadline**.



#### Application period

Winter semester: EU: May 1 - July 15 Non-EU: April 15 - May 31

Summer semester: EU: November 15 - January 15 Non-EU: November 5 - November 30



Get your admission letter from Hof University

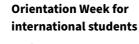
WiSe: in June/July

SuSe: in December/January



**Online enrolment** 

<del>م</del>





Start of your studies at Hof University WiSe: in September

SuSe: in March

WiSe: last two weeks of September

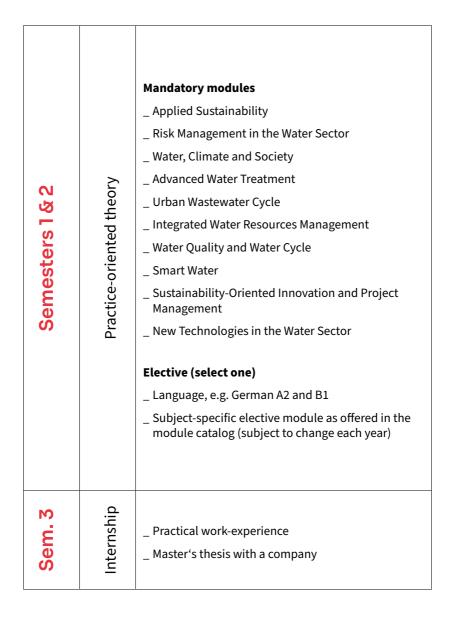
SuSe: first two weeks of March

WiSe: October 01

SuSe: March 15

WiSe: Winter semester SuSe: Summer semester

### **Course structure**



## What are my career perspectives?

## As a graduate, you...

...have excellent career opportunities for leading positions in the water sector, both in Germany and abroad, e.g.

- Management tasks in research and construction in the field of water and wastewater management
- \_ Leading positions in industry, public authorities, and medium-sized companies
- Development or research engineer for nature conservation and environmental protection
- \_ Planning and consulting work in specialized engineering offices
- \_ Activity as an expert and appraiser

# ... Entry positions?

#### You are ready to work as

- \_ Product / Project Manager
- \_ Planning Engineer
- \_ Sustainability Manager
- \_ Technical Advisor / Consultant
- \_ Researcher

Hof University is part of several water-related networks. This is a unique opportunity for our students to establish business contacts with potential employees at an early stage, e.g. for internships and research topics for the Master's thesis. In addition, we also have an own research institute on campus.



Institute for Sustainable Water Systems at Hof University

### UmweltCluster Bayern •



#### Our Institute for Sustainable Water Systems

(inwa) focuses on applied research and development in the key areas of sponge city, photonics and food production. In addition to these specialist areas, sustainability and digitalization are increasingly coming to the fore as research topics in their own right. The bundling of know-how results in an interdisciplinary knowledge transfer.

#### The Cluster of Environmental Technologies

**Bavaria** connects more than 230 companies, research institutions, municipalities and policy-makers from the field of environmental technologies made in Bavaria. Their objective is to develop intelligent and sustainable solutions for environmental challenges regionally and globally. Hof University is part of this network with its broad range of expertise, products and services.

#### The Competence Network Water and Energy

bundles know-how in the field of water and wastewater as well as renewable energies with a focus on smart grids. As a member of this regional network, Hof University has excellent business contacts with the associated member institutions.



## "The program is very future-oriented!"

#### **Robert from Germany, student**

#### Why do you think so?

"In this study program, the global problems of our water supply in the near future are highlighted (for instance water scarcity due to overpopulation). In addition, the latest technologies that the market already offers, and ongoing research are given to the students so that they can react adequately to any situation in their later professional life (e.g. digitalization, water cycle, water management, smart city concepts...)."

#### What else do you like about Hof?

"When it comes to housing, the city of Hof is very cheap and at the same time, the entire university is practically a new building. You can see that not only in the buildings but also in the mentality."



"The support and orientation services offered by the International Office were really helpful!"

#### Hima from India, student

"The curriculum and the structure of the course are completely beyond my expectation, incorporating many leading-edge technologies that will definitely have an influence in the future water sector. Student life in Hof is exciting with new methods of teaching, international friends and the study atmosphere at the University which is way different than in my home country India. The support and orientation services offered by the International Office were really helpful as an international student and eased the effort in finding out accommodation, and getting to know the academic culture in Germany."

## Contact



# Who can I contact with further questions?

Head of M.Eng. Program

Prof. Dr. Manuela Wimmer manuela.wimmer@hof-university.de



Welcome Center

**Carolin Huttner** Tel +49 9281 409-3319 welcome@hof-university.de



facebook.de/ HochschuleHof

instagram.com/ hof.university.international



youtube.com/c/ HochschuleHof1



Alfons-Goppel-Platz 1 95028 Hof/Saale Germany Phone +49 9281 409-3319 www.hof-university.de