Master in Sustainable Water Management and Engineering (M.Eng) - Hof University — Hof University

Source: https://www.hof-university.com/studying-at-hof-university/our-degree-programs/sustainable-water-management-and-engineering-meng.html

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.

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

excellent 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 waste water 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

You are ready to work as

Product / Project Manager

Planning Engineer

Sustainability Manager

Technical Advisor / Consultant

Researcher

Semester 1 and 2: Practice-oriented theory

Mandatory modules

Applied Sustainability

Risk Management in the Water Sector

Water, Climate and Society

Advanced Water Treatment

Urban Wastewater Cycle

Integrated Water Resources Management

Water Quality and Water Cycle

Smart Water

Sustainability-Oriented Innovation and Project Management

New Technologies in the Water Sector

Elective (select one)

Language, e.g. German A2 and B1

Subject-specific elective module as offered in the module catalog (subject to change each year)

Semester 3: Internship

Practical work-experience

Master‘s thesis with a company

InternshipOur M.Eng. students spend the third semester doing a practical internship in industry (e.g. manufacturer of equipment for waste water 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 conceptThe Master’s program is based on a hands-on, interdisciplinary concept. Current topics like sustainability, water risk management and water resource management are interconnected 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 ecological compatibility.

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

Academic requirements

Bachelor’s degreeor similarin engineering or natural sciencesproviding sufficient knowledge in environmental engineering, water technology and chemistry from an accredited university, at least 210 ECTS or equivalent (depending on home country);minimum grade 2,5according to the German grading system

sufficient knowledge inenvironmental engineering, water technology and chemistrymeansat least 5 credits (or their equivalent)were achievedin each of these areas

Applicants with less than 210 credits (ECTS) will be accepted but have to gain the missing credits by eitherdoing 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 did an internship).For both alternatives, please calculate an additional (fourth) semester.

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Language requirements

You need to prove yourproficiency in English. This can be done with either of the following:TOEFL minimum 90IELTS 6.5 or above

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

All applications must be done via ouronline application portal Primuss.

The application period for winter intake is between April 15 and May 31.

The application period for summer intake is between November 05 and November 30.

An admission committee intensively scrutinizes all applications and decides about final admission. Admission letters will be issued in June for winter intake and December for summer semester intake.

If you acquired your university entrance certificate abroad, uni-assist must assess the certificate before you can send it to Hof University. We advise you to send your documents touni-assistat least 4 weeks before our application deadline.

If you have any questions concerning the application process, please contactadmission(at)hof-university.de.

Perfect connections for your future

Hof University is part of several water-related networks like theCluster of Environmental Technologies Bavariaand theCompetence Network Water and Energy. 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 researchInstitute for Sustainable Water Systemson campus.

Sustainable Water Management and Engineering

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

Info and services

Timetable

Here you find your timetable.

The campus is the management and administrative center of the university. Here you will find the university library, high-tech laboratories and university sports facilities.

More about Campus Hof

Thi Hanh from Vietnam

"Water is highly valued in an era of water scarcity and climate change. Exploring this topic has always fascinated me and led me to search for an international program that would allow me to delve deeper into the environmental challenges related to water.

During my studies at Hof University, I noticed that the class size, which is not too large, and the different teaching approaches encourage students to engage openly with the lecturers, not only to acquire knowledge, but also to get a sense of cross-cultural working experiences. This is a buffering step that professors take to prepare students to effectively enter the global workforce.

In addition to external internship opportunities in the industrial sector, students can participate in research groups led by professors through student papers, internships, and master's theses. This is a great opportunity for those like me who are interested in research. At the moment, I am writing my master's thesis and working as a research associate in the Resource Efficient Food Production research group. I get a lot of pleasure from my work in aquaculture and water sanitation. My motto is "Every day at the university is a joy and an opportunity to learn something new"."

David from Germany

"The Master's program in Sustainable Water Management and Engineering not only teaches technical approaches to managing and protecting water resources in the future but also provides a holistic perspective on the entire topic. For me, the focus on sustainability and the emphasis on how practical change processes can be designed, what barriers can be encountered in practice, and how these can be overcome were very helpful and enriching.

Hof University offered a space where not everything was predetermined, but where you could also come up with your own creative solutions and not just apply the same scheme everywhere. I liked the city of Hof better than I had expected: there is nature nearby, everything around the university is easily accessible, the distances are not too long, and the rents are still comparatively cheap."

Harikrishnan from India

"My passion for sustainability led me to pursue a Master's degree in Sustainable Water Management and Engineering at Hof University. I found this program to be well structured, with professors who are always available to help, support and guide us, serving not only as experts in their own fields, but also as dedicated mentors who nurture a wide range of competencies in us.

What sets this program apart is its emphasis on practical learning - from hands-on projects to opportunities for student work within the university, which helped me finance my stay in Hof and gain invaluable professional experience. The consistent support from the faculty greatly aided my own research endeavors and ultimately led me to secure a position within the university's research team.

Although the program is taught in English, proficiency in German opens up more opportunities, which I learned along the way. Fortunately, Hof University is efficiently optimized to provide excellent support for international students, ensuring a smooth and enjoyable integration process. I would highly recommend the Master in Sustainable Water Management and Engineering at Hof University to anyone with a passion for sustainability or water management."

Robert from Germany

„In this study program, the global problems of our water supply in the near future are highlighted. 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...)."

Hima from India

„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."

Head of Program / Academic Advisor

Head of Examination Board

Student Affairs - Program Manager

Prof. Günter Müller-Czygan

by agreement

Prof. Dr. Manuela Wimmer

Wednesday: 12:00 - 13:00after previous registration by e-mail

Annalena Hüttner

Please contact our Welcome Center.