"The master's programme in Environmental Engineering at HTW Dresden attracts by the teaching methodology which balances between practical and theoretical knowledge . The exchange students who join every semester make you getting to know different cultures. The supportive nature of the professors motivates you towards your goals. "

Sanket Patil (India) 2<sup>nd</sup> semester Environmental Engineering

### **Career Prospects**

- Civil and environmental engineering companies
- Planning and consultancy offices
- Environmental protection agencies and environmental education institutions
- Environmental authorities and research institutes

### **Study Requirements**

- First university degree with a Bachelor or Diploma in engineering, natural or environmental sciences with a minimum of 180 ECTS
- English language skills have to be verified by suitable tests, such as TOEFL (min. 550 points, computerbased 213 points, internet-based 79 points), IELTS (min. 6.5), Cambridge Certificate in Advanced English (min. B); Cambridge Certificate of Proficiency in English (min.B)
- Application
- International Applicants with a foreign university degree apply via uni-assist.

Application deadline for winter semester: **15th June**. More information about the application process at: www.htw-dresden.de/degreestudents

 German applicants and applicants with a German university degree apply directly at HTW Dresden.
Application deadline for winter semester: **15th July** More information at: www.htw-dresden.de/bewerbung

## Studying at HTW Dresden



High practical relevance in teaching and research

- Rich variety of **internship opportunities** in the industry
- Personal study atmosphere in small groups

### no tuition fees

### tertifiat set 2014 tic famlengeechte hochschule

### Contact

### Faculty academic advising

Prof. Dr. rer. nat. Ulrike Feistel, Dipl.-Ing. (FH) Jakob Ebermann E-Mail: environ.eng@htw-dresden.de Phone: 0351 462 2668 www.htw-dresden.de/environmental-engineering

# Coordinator for international prospective students

Ms. Britta Weber E-Mail: international@htw-dresden.de Phone: 0351 462 2015 www.htw-dresden.de/international

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Hochschule für Technik und Wirtschaft Dresden University of Applied Sciences

# HTWD

# **Environmental Engineering**

## Master of Engineering



### **Environmental Engineering**

You are interested in project management and have the will to contribute to the protection of nature and the human population from adverse natural and anthropogenic impacts? You wish to expand and deepen your understanding and knowledge in the area of potentially deleterious natural processes and human activities? You are eager to develop novel solutions to the most pressing problems in our world? Then have a look at the Master's programme Environmental Engineering.



### **Compact Profile**

Degree: Master of Engineering (M.Eng.)

Language of instruction: English

Study form: Full-time-studies on campus

Semester start: Winter semester

Duration: 4 semesters

# Study Objective

As a graduate of the Master's programme Environmental Engineering, you will be equipped with scientific knowledge and application related know-how in the field of technical environmental protection and environmental planning.

You will be aware of the new developments and innovations in the renewable energy sector and other relevant markets, be able to develop innovative solutions to problems and manage projects in a leading position. Your acquired knowledge opens up career prospects in research and business in an international environment.



# Course of study

### MASTER

1st to 3rd semester: Professional studies Application-oriented learning in compulsory and compulsory elective modules

4<sup>th</sup> semester: Master thesis Master thesis (in cooperation with a partner company is recommended)

## Curriculum

### 1<sup>st</sup> Semester

Hydrology & Hydrometry

Thermal Renewable Energy

Innovation in Industry and Transportation

Scientific Work, Communication and Project Management

DaF B A1 or A2, German for Environmental Engineering (minimum one module)

#### Elective subjects (minimum 2 modules):

- Water, Air and Soil Analysis
- Geographic Information Systems
- Remote Sensing
- Applied Programming (Python)

### 2<sup>st</sup> Semester

Engineering Hydrology (Floods and Droughts)

Renewable Energy (Solar, Wind, Waterpower)

Sustainable Agriculture/ Organic Farming

Urban Ecology

Agile Green Business Design

#### Elective subjects (minimum 2 modules):

- Climate Change
- Managed Aquifer Recharge
- Solid Waste Management and Recycling
- Landscape Development/ Soil and Water Bioengineering

### 3<sup>st</sup> Semester

Environmental Impact Assessment

#### Soil Management

#### Floodplain Ecology

Elective subjects (minimum 4 modules):

- Hydraulic Modeling
- Water & Wastewater Treatment
- Experimental Soil Mechanics
- Building Information Modelling
- Construction Materials
- Railway Engineering
- Engineering Project

#### 4<sup>th</sup> Semester

Master thesis

ECTS-Points: 120