

## Tackling the World Water Crisis

Limited fresh water resources, increasing pollution of the natural water cycle and increasing demand of high quality water to meet needs of the still growing global population are driving forces of the upcoming world water crisis. To counteract this development a combination of highly sophisticated management and technology of water and waste water is getting more and more important. The MTW<sup>3</sup> curriculum offers such a combination of knowledge represented by lecturers from the University of Duisburg-Essen and experts from water industry of the River Ruhr and River Rhine area.

### Master Study Course MTW<sup>3</sup>

The Master course (MSc) "Management and Technology of Water and Waste Water – MTW<sup>3</sup>" is an internationally orientated course which is not only addressed to German but especially to foreign students.

MTW<sup>3</sup> is a 2-year interdisciplinary Master course based on natural scientific and technical fundamentals with main focus on process engineering and advanced engineering as well as economics and water management.

#### All studies are related to:

- **Water procurement**
- **Water treatment**
- **Draining of storm and waste water**
- **Waste water treatment**

**Graduates of the MTW<sup>3</sup> course will be familiar with German water management and treatment systems. They will be able to think interdisciplinary by combining knowledge on economics, water management and engineering offering a wide range of possibilities for prospective careers especially in water supply, sewage disposal, water boards and engineering companies.**



***For foreign students the MTW<sup>3</sup> Master course offers the opportunity of technology transfer to their home countries in consideration of the special regional demands.***

### Course Contents

- Basics of water technology and fluid dynamics
- Advanced engineering
- Process engineering
- Sewer systems
- Water and waste water treatment
- Management and controlling
- Water management

In addition to 18 compulsory courses, students have the option to choose lectures with a total of 12 credits from a special catalogue. Thus, students have the opportunity to focus their studies on their personal interests and abilities.

Furthermore, students can set individual priorities by selecting lectures from non-technical subjects with a total of 6 credits.

#### Curriculum:

[www.uni-due.de/ise/curriculum/m-mtw3.shtml](http://www.uni-due.de/ise/curriculum/m-mtw3.shtml)

## Employment Prospects

Due to the international orientation of the MTW<sup>3</sup> Master course graduates can work in various fields of water technology and management also in foreign countries and international organisations.

Typical jobs for graduates of the MTW<sup>3</sup> Master course can be found in the following institutions:

- Engineering companies
- Water boards and similar institutions in other countries
- GO's (Government organisations), ministries and authorities
- NGO's (Non-Government organisations)
- Research companies and universities

### Arman's View (Student from Iran)

***"During the first three semesters in the MTW<sup>3</sup> Master's programme, we were provided with solid grounding, ideas and tools in subjects regarding to water treatment methods, quality analysis and resources management. The obtained theoretical knowledge was accompanied with valuable practical experience in the second year in our laboratories in addition to the opportunity of gaining authentic insight into everyday work in an industrial environment due to our mandatory industrial practical course.***



***This close connection between the chair and industry can help students to acquire tools which make them competitive in the job market for pursuing careers in academic, private, governmental and non-governmental sectors."***



### Study Location

The University of Duisburg-Essen is a young and modern university with around 40,000 students. You will benefit from the convenient and friendly atmosphere, the small working groups and the options for in-depth specialisation provided by the scientists involved in the course. A convenient public transport system makes it possible to arrive at the university at ease.

### Admission Requirements

Students can enrol from a variety of backgrounds. Formal requirements are:

- a university bachelor degree in an appropriate subject area with adequate length of studies and with an average mark of at least 2.5 issued in Germany or a foreign equivalent
- German and English skills both at least level B2 evidenced by certificate

For a complete list of required documents please visit the ISE website: [www.uni-due.de/ise](http://www.uni-due.de/ise)

### Enrolment

International applicants have to fill in the official application form which can be downloaded from the ISE-Website ([www.uni-due.de/ise](http://www.uni-due.de/ise)) and submit it together with the required documents.

All documents have to be submitted to the International Office at the University of Duisburg-Essen (see contacts).

### Contact and further Information

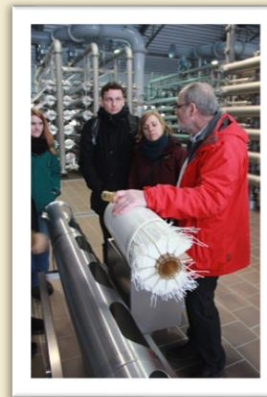
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Geibelstrasse 41  
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[www.uni-due.de/international](http://www.uni-due.de/international)

International students might contact the Support Centre for International Engineering Students (SCIES). The mission of SCIES is to support international students at the Faculty of Engineering of the University of Duisburg-Essen (UDE) and to help them gain the best from their experience at UDE.

[www.uni-due.de/scies](http://www.uni-due.de/scies)  
[scies@uni-due.de](mailto:scies@uni-due.de)



MSc in  
**Management and Technology of  
Water and Waste Water – MTW<sup>3</sup>**

**MTW<sup>3</sup>**

UNIVERSITÄT  
DUISBURG  
ESSEN

*Open-Minded*

**International Master  
of Science Study Course**

**within the Programme**

**International Studies of Engineering  
(ISE)**

**University of Duisburg-Essen  
Germany**