



Admission requirements

Students from a variety of backgrounds can enroll in the program. Formal requirements include

- successfully completed bachelor degree in biology, chemistry, environmental sciences, water sciences or similar study courses with a GPA of at least 3.0 (german grade system).
- At least 15 credits in two of the following three areas of expertise: Biology, Chemistry, Environmental Sciences
- A practical bachelor thesis relevant for the field of Environmental Toxicology.
- An English certification of the Common European Framework of Reference for Languages (CEFR) with a level of at least B2.

Application

EnviTox starts with the winter term. Applicants have to fill out the official application form and submit it together with the other required documents (please see www.uni-due.de/envitox).

- Germans, foreign students with a German Abitur and EU/EWR citizens should apply at:

University Duisburg-Essen
Faculty of Biology
Dr. Nadine Ruchter
Universitätsstraße 5
45141 Essen, Germany

- Interested students from outside EU/EWR should apply at:

University Duisburg-Essen
International Office
Universitätsstraße 2
45141 Essen, Germany



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Deadline for application

EU/German students: **July 15th**

Students from outside EU/EWR: **June 15th**

for the course starting in October.

If you have questions regarding the enrolment procedure, please visit our website and contact the EnviTox coordinator.

Contacts

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**Environmental Toxicology –
EnviTox**

International Master of Science Study Course

It's all about: pollution

To live in the 21st Century means to live in a polluted world. Urbanization and industrial activities sustain our convenient lifestyle, but the threats for society and the environment often remain unclear. The assessment of toxic substances in the environment is a considerable challenge and a complex task. Abiotic and biotic cycles of substances have to be investigated. Bioavailability has to be proven and toxicity tests with plants and animals have to be conducted on different levels (cells, individuals and populations) for single substances and their interactions with others.

Various stressors can have synergistic effects on the environment which are difficult to quantify and to predict. This requires interdisciplinary knowledge from the fields of biology, chemistry, environmental science, ecology and legal aspects. And this is the concept of the curriculum "Environmental Toxicology".



Curriculum

The two-year Master's programme "Environmental Toxicology" (EnviTox) is an integrated, interdisciplinary Master Degree Programme. Students with a Bachelor Degree in biology, chemistry or environmental sciences and similar fields of study are welcome as applicants for EnviTox. The first year of the study course focuses on the theoretical background and essential concepts, while the second study year will give you the opportunity to gain practical experiences. The nine modules of the curriculum cover three major areas and their application:

■ Fundamentals

Here, students will acquire fundamental knowledge of the movement of substances within environmental compartments (Environmental Chemistry), obtain insight into important molecular biological sciences (Biochemistry and Bioinformatics) and will learn how to monitor chemical substances in different matrices (Environmental Analytics).

■ Effects

Students learn about the effects different pollutants have on cells, individual plants and animals, as well as on populations. Furthermore, they apply different methods for identifying those effects. In addition, they gain competencies related to the presentation of information, teamwork, information technologies and strategies to solve problems.

■ Applied Environmental Toxicology

Students get insight into the European legislation regarding the use of xenobiotics and the implementation of monitoring, assessment and risk management by industry and other stakeholders. Furthermore, in a 16 week internship students are encouraged to get first working experiences in an industrial, administrative, advisory or scientific setting in Germany or abroad.



Employment prospects

Along with state-of-the-art theoretical concepts, this master degree programme will provide students with an excellent foundation for a successful career. Graduates in Master of Environmental Toxicology are experts in the monitoring and assessment of xenobiotics and other anthropogenic substances. They can hold positions in the fields of:

- Chemical and pharmaceutical industry
- Private and administrative offices
- Analytical laboratories
- Environmental protection agencies and NGOs
- Furthermore, successful students may also continue their academic education aiming at a PhD.

Study location

The University of Duisburg-Essen is a modern university with approximately 40,000 students. You will benefit from the convenient and friendly atmosphere, the small working groups and the options for in-depth specialization provided by the scientists involved in the course.