INTERNATIONAL MASTER OF SCIENCE IN ENVIRONMENTAL TECHNOLOGY AND ENGINEERING

Erasmus Mundus Master's Programme jointly organised by Ghent University (Gent, Belgium), UNESCO-IHE Institute for Water Education (Delft, The Netherlands) and University of Chemistry and Technology (Prague, Czech Republic).

The master's programme is also supported by several associated partners from all over the world.

120 ECTS CREDITS – LANGUAGE: ENGLISH – DEGREE: MASTER OF SCIENCE

COURSE CONTENT

Growing awareness of the human impact on the environment has convinced most governments of the need to prevent air, water and soil pollution. Increasingly, remediation of contaminated sites is becoming a priority target. Consequently, there is a strong and ever increasing demand for specialists trained in pollution prevention and remediation.

This Joint Erasmus Mundus programme will address these needs by educating a new generation of environmental scientist and engineers that can provide adequate and state-of-the-art environmental technology and engineering solutions to tackle complex, multidisciplinary environmental issues.

Successful graduates will have acquired a **comprehensive knowledge** of:

- the nature and severity of environmental pollution;
- the way polluted water, waste, gas, soils and sediments can be treated;
- the way ecosystems and the atmosphere can be protected from pollution;
- the way to prevent environmental pollution through resource management and application of re-use technologies.

They will be able to **develop, design and apply technologies for the prevention and remediation of environmental pollution**.
In addition, they should be capable of:

- searching scientific information;
- conducting scientific research in the field of environmental technology and engineering;
- reporting their findings by means of scientific reports and papers;
- communicating effectively in English and transferring knowledge to both the scientific and non-scientific world through oral presentations and media communications.

COURSE STRUCTURE

The overall programme structure is outlined below.

- General competence and background courses: 22 credits (sem 1), including a 2 credits seminars course
- Advanced and specialisation courses: 30 credits (sem 2)
- Transferable skills courses: 4 credits (sem 1 and sem 2)
- Specialisation courses: 18 credits (sem 3) (including 3 credits seminars)
- Elective courses: 16 credits (sem 1, sem 2, sem 3)
- Elective language courses
- Elective internship
- Master's dissertation: 30 credits (sem 4)

> Master's dissertation

The master's dissertation is a requirement for every candidate to obtain a master's degree. The master's dissertation is an original piece of research work. It aims to develop and strengthen the research capacity skills of the students. The student selects a topic and is given guidance by a promoter or supervisor. The master's dissertation consists of a literature review part, a theoretical reflection and an original analysis of the topic.

PROGRAMME MOBILITY

Over the study programme, students move between the partner institutions. Students start at UNESCO-IHE in Delft (The Netherlands). The second semester, they move at University of Chemistry and Technology (Czech Republic). The third semester, they study at Ghent University (Ghent, Belgium).
The fourth semester is reserved for master's dissertation research, which is conducted at one of the partner institutes or with an associate partner.

CAREER PERSPECTIVES

Trained graduates will be fully prepared to fulfil executive functions in international institutions (government, universities, non-governmental organisations, etc.) and private companies that deal with either application and development of pollution prevention, remediation and engineering techniques or regulatory decision making.

FACULTY OF BIOSCIENCE ENGINEERING

2017–18

BW13

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120 ECTS CREDITS – LANGUAGE: ENGLISH – DEGREE: MASTER OF SCIENCE

TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

Na onderzoek naar de geschiktheid van de student:

- academisch bachelordiploma (bij voorkeur in wetenschappen of toegepaste (biologische) wetenschappen)

Voor de toelating moet (met puntenlijsten) een basis aan wetenschappelijke kennis aangetoond worden in de volgende vakgebieden: (1) wiskunde, (2) fysica, (3) chemie.

TAAL

Je moet een taalbewijs Engels voorleggen. Meer informatie over de aanvaarde taalbewijzen op www.itc.ugent.be

ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

Each application will be evaluated by a board of admission of the specific programme and has to be approved by the Faculty Council and by the Rector's office.

Entry conditions:

Applicants must have at least a bachelor's degree (minimum 180 ECTS credits) in pure or applied sciences (e.g. chemistry, biology, geology, civil or agricultural engineering, environmental or agricultural sciences, etc.) or an equivalent level. Applicants must be able to demonstrate through their transcripts sufficient academic knowledge of mathematics, physics and chemistry which are an absolute requirement.

LANGUAGE

The applicant must be proficient in English. More details on the requirements at www.itc.ugent.be.

PRAKTISCHE INFORMATIE

Studieprogramma:
https://studiegids.ugent.be
> faculteiten > opleidingstypes > ga naar de opleiding van je keuze

Infomomenten
Masterbeurs
www.ugent.be/masterbeurs

PRACTICAL INFORMATION

Study programme
www.ugent.be/coursecatalogue
> by Faculty > Programme types > select your programme

Application deadline
Consult www.itc.ugent.be for programme specific application procedures and deadlines.

Enrolling institution
Ghent University

Tuition fee
Separate amounts apply - www.ugent.be/tuitionfee
This programme is supported by (Erasmus+ and other) scholarships. More information at www.itc.ugent.be.

Trajectbegeleiding/Learning path counsellor
Mevr. Isabelle Vantornhout
studietraject.coupure.bw@ugent.be - www.ugent.be/bw

Contact
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International Training Centre
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Last update: January 2017

200 YEARS GHENT UNIVERSITY