INTERNATIONAL MASTER OF SCIENCE IN SOILS AND GLOBAL CHANGE (SOIL-PLANT SYSTEM PROCESSES AND GLOBAL CHANGE)

PROGRAMME JOINTLY OFFERED BY GHENT UNIVERSITY, AARHUS UNIVERSITY, BOKU UNIVERSITY, UNIVERSITY OF GÖTTINGEN

120 ECTS CREDITS - LANGUAGE: ENGLISH

FACULTY OF BIOSCIENCE ENGINEERING

2026-27

WHAT

The Erasmus Mundus International Master in Soils and Global Change (IMSOGLO) is a research-driven, internationally oriented programme designed to educate the next generation of soil scientists. It equips students with the knowledge and skills to understand soil physical, chemical, and biological processes; to measure, monitor, map, and model soils and their processes across space and time; and to design and evaluate sustainable and climate-smart soil management strategies. Graduates are trained to work in multi-, inter-, and transdisciplinary settings, balancing scientific, societal, and stakeholder perspectives, and to contribute to policy-relevant research aligned with the UN Sustainable Development Goals, the EU Green Deal, the EU Mission A Soil Deal for Europe, and the EU Soil Monitoring Law.

IMSOGLO is jointly organized by a consortium of four leading European universities - Ghent University (Belgium), Aarhus University (Denmark), BOKU University Vienna (Austria) and University of Göttingen (Germany) - in collaboration with 11 associate partners worldwide. This partnership enables a high-quality, inclusive, and future-oriented learning environment that no single institution could offer independently.

IMSOGLO offers a coherent, flexible curriculum with two specializations that align with students' backgrounds and aspirations. A well-balanced mix of mandatory courses and electives provides a strong foundation while allowing students to tailor their studies to individual interests. In addition to the master's dissertation – for which students may choose a topic from a provided list or propose their own – the programme offers a broad set of electives linked to the selected specialization. Spanning agricultural, forest, natural, and urban ecosystems, IMSOGLO integrates theory, laboratory work, and practical application through a problem-solving, research-based approach. Graduates acquire the competences needed to pursue PhD studies or to enter professional careers in soil science and related fields.

STRUCTURE

IMSOGLO is a two-year, 120-ECTS programme.

After three weeks of preparatory onboarding sessions and a one-week primer event, all students start together at Ghent University in the **first term** (30 ECTS). They cover soil fundamentals to consolidate fundamental knowledge on soil science (soil biology, soil physics, soil chemistry, soil evolution), land information systems and statistics, providing a shared foundation for the chosen specialization.

For the remaining terms, students follow one of two mobility tracks: Ghent University (Belgium) and Aarhus University (Denmark) for the specialization Soil Ecosystem Services and Global Change, or BOKU University Vienna (Austria) and University of Göttingen (Germany) for the specialization Soil-Plant System Processes and Global Change.

The **second term** (30 ECTS), hosted at either Ghent University or at BOKU University Vienna depending on the chosen specialization, focuses on advanced topics and deepens disciplinary expertise while strengthening key professional competences (data science, scientific communication, open project work, internship). Between the first and second year, students from both specializations come together for the Living Lab Summer School, where they engage with experts and stakeholders. The joint format enables exchange across tracks and synchronizes specialization-specific knowledge and skills, as students collaboratively evaluate sustainable land management practices in relation to the UN Sustainable Development Goals and the EU Green Deal targets.

In the **third term** (30 ECTS), students study at either Aarhus University or at University of Göttingen depending on the chosen specialization, taking further advanced courses and continuing developing professional skills. The term may include excursions in France or Greenland to witness the effects of global change on soils.

The **fourth term** (30 ECTS) is dedicated to the Master's dissertation. Students are supervised by experts from both partner universities within their specialization, and occasionally, by associated partners in Europe and worldwide.

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LABOUR MARKET

An employability needs analysis identified a pressing shortage of graduates with expertise in the two-way interactions between global change and soils – how global change affects soils and soil functions, and how soils influence climate and broader environmental change. IMSOGLO is designed to address this gap by training such specialists. Surveys further indicate a strong demand for IMSOGLO graduates, particularly in academic research. As their careers progress, many graduates are expected to move increasingly into consultancy, administration, and education.

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TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

1 **Na onderzoek van de bekwaamheid van de student om de opleiding te volgen:**
- Een diploma van een bacheloropleiding in het academisch onderwijs binnen één van de volgende studiegebieden (of een combinatie ervan):
  - Biotechniek
  - Industriële Wetenschappen en Technologie
  - Toegepaste Biologische Wetenschappen
  - Toegepaste Wetenschappen
  - Wetenschappen

Additional Information on Admission (Flemish Degree)

All applicants for IMSOGLO (including holders of a Flemish degree) should apply for admission via the procedure described on https://imsoglo.eu/admission-application/

ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

Academic requirements
- Academic bachelor degree* (minimum 180 ECTS credits or equal) in pure or applied sciences (e.g. chemistry, biology, geology, physical geography, geo-ecology, civil or agricultural engineering, environmental or agricultural sciences, etc.) or an equivalent level from a recognized university or engineering college.
- The obtained bachelor degree must contain at least 40 ECTS credits or equal in natural sciences, covering at least four of the following disciplines: physics, chemistry, mathematics, ecology, biology, geology, physical geography, environmental sciences and agricultural sciences.
- The grades obtained during the bachelor degree must be very good or excellent (typically top 30% of the student cohort).

*Applicants who are national of European Economic Area (EEA) countries (all EU countries + Iceland, Liechtenstein, Norway) are exempted from having obtained the bachelor degree before the deadline of 28 February and can apply for an Erasmus Mundus scholarship based on a proof of enrolment in their last bachelor year and a transcript of records of earlier bachelor years. Their motivation letter should clearly state when obtaining the bachelor diploma is expected.

LANGUAGE REQUIREMENTS

Language requirements Dutch: no language requirements

Dutch: No language requirements
Language requirements for this study programme differ from the required standard level for English taught study programmes as specified in the Ghent University Education and Examination Code:
English:
The English language proficiency can be met by providing a certificate of one of the listed English Language Test Certificates:
- TOEFL iBT (total score of at least 90 out of 120), TOEFL iBT Home Edition is accepted
- Academic IELTS (overall band score of at least 6.5 with at least 6 for all sub parts: speaking, writing, reading, listening), IELTS online is not accepted
- Cambridge C1 advanced certificate (formerly Cambridge Certificate of Advanced English (CAE)).

Other test certificates such as TOEIC, TOEFL ITP, Duolingo, ... are not accepted.
Exception: Only if you have obtained your previous higher education degree in Australia, Belize, Botswana, Cameroon, Canada, Gambia, Ghana, Guyana, Hongkong, India, Ireland, Kenya, Liberia, Malawi, Malta, Namibia, New-Zealand, Nigeria, Papua New Guinea, Philippines, Rwanda, Sierra Leone, Singapore, South Africa, Sudan, South Sudan, Tanzania, Uganda, United Kingdom, United States of America, Zambia or Zimbabwe, you can be exempted to provide an English Language Test Certificate. In this case, you need to provide an English Language of Instruction Certificate issued and signed by your previous university. This certificate should clearly state that the language of instruction during your previous degree was English. A Language of Instruction Certificate will not be accepted if the degree as obtained in another country than the countries listed above.
See also https://imsoglo.eu/admission-application/

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PRACTICAL INFORMATION

Study programme

studiekiezer.ugent.be/international-master-of-science-in-soils-and-global-change-soil-plant-system-processes-and-global-change-en/programma

Information sessions

EVOLV

evolv.gent/en/students/further-studies

Enrolling institution

Ghent University, University of Göttingen, Boku University, Aarhus University

Information on enrolment at Ghent University.

Application Deadline (for International degree students)

More information on programme specific application procedures and deadlines for both **Belgian and international students.**

Tuition fee

More information is to be found on: www.ugent.be/tuitionfee

Contact
Ghent University
Faculty of Bioscience Engineering
International Training Centre
Coupure Links 653
9000 Gent
imsoglo@ugent.be
https://imsoglo.eu/
Learning path counsellor
Mevr. Isabelle Vantornhout
studietraject.coupure.bw@UGent.be

www.imsoglo.eu

GHENT UNIVERSITY

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