INTERNATIONAL MASTER OF SCIENCE IN SOILS AND GLOBAL CHANGE (SOIL ECOSYSTEM SERVICES AND GLOBAL CHANGE)

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

120 ECTS CREDITS - LANGUAGE: ENGLISH

WHAT

The International Master in Soils and Global Change (IMSOGLO) is a unique programme designed to educate the next generation of soil scientists. The programme is specifically tailored to develop the knowledge and skills students need to characterise soils, understand soil evolution in an ecosystem context under global change based on a deep insight in the underlying processes and interactions, and develop strategies for climate mitigation and adaptation. IMSOGLO provides students with a comprehensive understanding of soil processes in a global change context, including the ability to contribute to multi-, inter-, and transdisciplinary work in different ecosystems. Additionally, students gain awareness of high-order targets connected to the UN Sustainable Development Goals and the EU's Green Deal to make conscious contributions to policy-relevant research.

IMSOGLO is a two-year, 120-ECTS programme jointly organised by four renown European universities:

- Ghent University (Belgium)
- Aarhus University (Denmark)
- University of Natural Resources and Life Sciences Vienna (Austria)
- University of Göttingen (Germany)

IMSOGLO students jointly follow the first term at Ghent University to level their fundamental soil science knowledge. The remaining terms are spent either at Ghent University and Aarhus University for the specialisation Soil Ecosystem Services and Global Change, or at the University of Natural Resources and Life Sciences Vienna and the University of Göttingen for the specialisation Soil-Plant System Processes and Global Change.

The second and third term consist of mandatory and elective course units, deepening the students' knowledge and skills in the chosen specialisation, and broadening the students' knowledge and skills through open choice of electives and softskill course units. Students from both specialisations meet again during the Living Lab Summer School between the first and second year. The fourth term is dedicated to the Master's dissertation.

STRUCTURE

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

The **first term** at Ghent University (Belgium) amounts to thirty ECTS and brings all students to a comparable level on biological, chemical and physical soil processes, land information systems, and statistics.

The **second term** of thirty ECTS is followed either at Ghent University or the University of Natural Resources and Life Sciences Vienna (Austria), depending on the chosen specialisation, Soil Ecosystem Services and Global Change, or Soil-Plant System Processes and Global Change, respectively. This specialising term focuses on more advanced topics and the development of soft skills. An optional Work Placement is offered during the second term. Both the acquired knowledge and skills are to be applied in a joint **Summer School** at a Living Lab organised during Summer between the first and the second year, where they also meet experts and stakeholders. The jointness of the Living Lab Summer School allows students to synchronise and exchange their obtained specialisation-specific knowledge and skills. They work together on evaluating sustainable land management practices in relation to the UN Sustainable Development Goals and the EU's Green Deal targets, thus addressing "wicked" problems with contradicting, conflicting and sometimes even changing requirements.

The **third term** is followed either at Aarhus University (Denmark) or at the University of Göttingen (Germany) depending on the chosen specialisation, Soil Ecosystem Services and Global Change, or Soil-Plant System Processes and Global Change, respectively. This specialising term also focuses on more advanced topics and the development of soft skills. The third offers the opportunity to join excursions abroad (Europe, Greenland) to witness effects of global change on soils.

The **fourth term** is dedicated to the Master's dissertation. Students are supervised by experts of both the partner universities that offer the specialisation chosen by the student. The Master's dissertation topic can also be offered and co-supervised by one of the associated partners inside and outside Europe.

LABOUR MARKET

An employability needs analysis performed by IMSOGLO showed a pressing lack of graduates specialised in how global change affects soils and soil functions and vice versa is pressing. The IMSOGLO programme delivers such specialists. IMSOGLO alumni surveys showed that there is a

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clear need for IMSOGLO alumni, most importantly in academic research. At a later stage in their career, IMSOGLO graduates will mostly shift from academic research towards consultancy, administration and education.

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FACULTY OF BIOSCIENCE ENGINEERING

2025-26

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 recognised 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).

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LANGUAGE REQUIREMENTS

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 following tests:
- TOEFL IBT 90 (TOEFL IBT home edition is accepted)
- ACADEMIC IELTS 6,5 overall score with a min. of 6 for writing
- CAMBRIDGE C1 advanced certificate (formerly Cambridge Certificate in Advanced English (CAE))

Exception: Candidates having obtained a prevoius 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 States of America, United Kingdom, Zambia or Zimbabwe need to provide an English language of instruction certificate issued and signed by their previous university. This certificate should clearly state that the language of instruction was English.

A language of instruction certificate will not be accepted if the degree was obtained in another country than the countries listed above.

See also https://imsoglo.eu/admission-application/

PRACTICAL INFORMATION

Study programme

studiekiezer.ugent.be/international-master-of-science-in-soils-and-global-change-soil-ecosystem-services-and-global-change-en/programma

Information sessions

Graduation Fair

afstudeerbeurs.gent/en/students/further-studies

Enrolling institution

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

Information on enrolment at Ghent University.

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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

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International Training Centre
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https://imsoglo.eu/

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