GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Environmental Impact Assessment (C002615)

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0 **Study time 150 h**

Course offerings and teaching methods in academic year 2024-2025

A (semester 1)	English	Gent	lecture
			practical

Lecturers in academic year 2024-2025

Paepen, Marieke	WE13	lecturer-in-charge

Offered in the following programmes in 2024-2025	crdts	offering
Master of Science in Teaching in Science and Technology(main subject Geology)	6	A
Master of Science in Sustainable Land Management(main subject Land and Groundwater Management)	6	A
Master of Science in Sustainable Land Management(main subject Urban Land Engineering)	6	A
Master of Science in Geology	6	A
Master of Science in Geology	6	A
Exchange programme in Geology (master's level)	6	A

Teaching languages

English, Dutch

Keywords

Assessment and evaluation of environmental impacts of future actions; recommendation of mitigating measures

Position of the course

In this course, the principles and the procedure of the environmental impact assessment are elucidated, and placed in an international context. The general methodology of environmental impact assessment is treated. A concrete case-study teaches them to deal with environmental impact assessment in practice.

Contents

- Definition and objectives
- Historical background
- The activities in need of environmental impact assessment
- Experts
- Contents and scope of disciplines
- Strategic environmental assessment and project-EIA
- The reference situation
- The planned situation
- Alternatives
- Assessment and evaluation of environmental impacts
- Mitigating measures
- Monitoring and post-evaluation
- The environmental impact assessment process in practice

Initial competences

Knowledge of a technical environmental discipline (air; climate; light, heat and radiation; sound and vibrations; soil (geology - pedology); water (surface water - groundwater)) or an integrating environmental discipline (humans (health - urban planning); fauna and flora; monuments, landscapes and material goods)

Final competences

1 The students have an insight into the background and methodology of environmental impact assessment.
2 The students are capable to apply the methodology of environmental impact assessment to a concrete case.
3 The students are able to proceed to environmental impact assessment in practice, in the discipline corresponding to their basic education.
4 The students are able to identify the interaction between different disciplines of concern in a plan or project subjected to EIA, and to integrate it into the EIA.
5 The students exhibit the creativity required to characterize the reference situation and the planned situation.
6 The students are able to reflect independently and critically about their ideas concerning the activity, and translate this into well-considered conclusions (reference situation, planned situation) and more adequate solutions (alternatives, mitigating measures).
7 The students are trained in problem-preventing and problem-solving thinking and acting.
8 The students are competent in collaboration and communication.
9 The students are sensitive towards the societal needs and capable to ethical and societally justified acting.
10 The students are able to contribute to the development of problem-solving strategies in a professional context.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Excursion, Lecture, Practical

Extra information on the teaching methods

The teaching is supported by powerpoint presentation. A full day excursion is organized, in which the project of the group work is visited. For the practicals, the students must in group compile the terms of reference of EIA of a given project (or plan). Furthermore, they must develop the terms of reference of a project (or plan) of their own choice, and present it to the class.
Part of the teaching activities may be organized online.

Study material

Type: Syllabus

Name: Syllabus'
Indicative price: € 5
Optional: no

References

World Bank (1991 + updates). The Environmental Assessment Sourcebook. http://lnweb18. worldbank.org/ESSD/envext. nsf/47ByDocName/EnvironmentalAssessment Organisation for Economic Co-operation and Development. Methodologies for Environmental Assessment. http://www.oecd.org/department/0,2688,en_2649_34185_1_1_1_1_1,00.html

Course content-related study coaching

The seminars include an interaction with the tutor, in which ample opportunity is provided for questioning and discussion concerning EIA-problems.

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Oral assessment, Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Oral assessment, Written assessment with open-ended questions

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

The examination intends to test whether the student has acquired an insight into the background and methodology of environmental impact assessment.

Calculation of the examination mark

The score consists for 1/2 of the marks on the work performed in group (half of it on the TOR, the other half on the EIA-report), for 1/4 of the marks on the individual work (presentation + report), and for 1/4 of the marks on the exam.