

Sustainability, Entrepreneurship and Ethics (E098512)

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

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2023-2024

A (semester 2)	Dutch	Gent	lecture
			independent work

Lecturers in academic year 2023-2024

Beunis, Filip	TW06	lecturer-in-charge
Mannens, Erik	TW06	co-lecturer
Poelaert, Ludo	TW18	co-lecturer
Verbeken, Kim	TW11	co-lecturer

Offered in the following programmes in 2023-2024

	crdts	offering
Bachelor of Science in Engineering(main subject Biomedical Engineering)	3	A
Bachelor of Science in Engineering(main subject Chemical Engineering and Materials Science)	3	A
Bachelor of Science in Engineering(main subject Civil Engineering)	3	A
Bachelor of Science in Engineering(main subject Computer Science Engineering)	3	A
Bachelor of Science in Engineering(main subject Electrical Engineering)	3	A
Bachelor of Science in Engineering(main subject Electromechanical Engineering)	3	A
Bachelor of Science in Engineering(main subject Engineering Physics)	3	A
Bachelor of Science in Engineering (Joint Section)	3	A

Teaching languages

Dutch

Keywords

Project work, communication, sustainability, entrepreneurship and ethics

Position of the course

This course offers a first introduction to engineering related aspects of sustainability, entrepreneurship and ethics, and is the start of the learning lines around these aspects that will continue in subsequent courses.

These aspects will be made concrete by applying them in the context of a specific engineering project, preferably the project that the students have worked on during the course Modelling, making and measuring.

Contents

The course consists firstly of a number of lectures for all students, and secondly of an activity week (the week before the Easter holidays), in which other courses are suspended.

- Lectures: General introduction to sustainability, entrepreneurship and ethics in the framework of engineering activities, by an Ghent University's ZAP-member (3 hours). Specific and practical illustration of these subjects by guest lecturers (3 hours).
- Activity week: Workshops, presentations and other activities in which two subjects (sustainability, entrepreneurship and/or ethics) are explored and applied preferably in the framework of the project that the students have worked on in the course MMM of the first semester. During this week the students will, in groups, prepare and present a report and/or other work.

Initial competences

Secondary school education, basics of project work and written/oral communication.

Final competences

Having a general knowledge about aspects of sustainability, entrepreneurship and ethics, and being able to apply those in the framework of engineering activities.

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

Group work, Excursion, Lecture, Independent work

Extra information on the teaching methods

The six common sessions are lectures with mandatory attendance.

During the activity week several teaching methods will be offered and combined, depending on the interests of the students, and on the specific project on which they work.

Learning materials and price

slides and additional information of the lectures and activities will be made available in the online learning platform

Assessment moments

continuous assessment

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

The attendance and participation of the students during the 6 common lectures is required and will be tested, e.g. by a number of short questions at the end of each lecture. Attendance and participation during the activity week (required participation of 75% of the activities) will be assessed by the supervisors of the activities.

During the activity week two aspects (sustainability, entrepreneurship and/or ethics), chosen by the students in agreement with the supervisors of their specific project, have to be explored and worked out in the form of a presentation/report/other final project, that will be graded on the basis of content and form.

Calculation of the examination mark

- Attendance and participation during the lectures: 3 points
- Attendance and participation during the activity week: 2 points
- Score of the final project: 15 points
- If the score for attendance/participation separately, or the score for the final projects separately, is less than 50%, only the lowest score counts towards the final score.