

Biotechnology in a Professional and Societal Context (I002933)

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

Credits 4.0 **Study time 120 h**

Course offerings in academic year 2024-2025

A (Year) English Gent

Lecturers in academic year 2024-2025

Van de Wiele, Tom	LA25	lecturer-in-charge
De Mey, Marjan	LA25	co-lecturer
Desmet, Tom	LA25	co-lecturer
Geelen, Danny	LA21	co-lecturer
Kyndt, Tina	LA25	co-lecturer
Skirtach, Andre	LA25	co-lecturer
Stock, Michiel	LA26	co-lecturer
Van Camp, John	LA23	co-lecturer
van der Meulen, Karen	LA25	co-lecturer

Offered in the following programmes in 2024-2025

	crdts	offering
Master of Science in Bioscience Engineering: Cell and Gene Biotechnology	4	A

Teaching languages

English

Keywords

Biotechnology, Technology Transfer

Position of the course

This course aims at interactively familiarizing the student with the current applications of biomedical, industrial and plant biotechnology. The course raises the student's awareness on writing and managing a research project, dissemination and valorization of its results and its impact on the society.

Contents

1. Project conceptualization and writing
2. Project management including biosafety and regulation
3. Dissemination
4. Valorisation

Initial competences

Biotechnology in a Professional and Societal Context builds on certain learning outcomes of course unit Plant Biotechnology, Industrial biotechnology, Human and Animal Biotechnology and Management for Engineers; or the learning outcomes have been achieved differently.

Final competences

- 1 the students have acquired a sound understanding in project writing and management
- 2 Understand and apply appropriate biosafety (and biosecurity) measures related to experimental set-up and procedures and Recognize applicable legal requirements and prepare the necessary documents to obtain authorizations
- 3 the students have acquired a sound understanding of the socioeconomic relevance of academic research and expertise, particularly biotechnology
- 4 the students have acquired a sound understanding of the Valorization/Techtransfer landscape, from both an academic and industry point of view.
- 5 the students have acquired a sound understanding of how to detect research results or

know-how that potentially can make it to real-life applications, and of how to purposely develop this know-how into mature technology that is ready for transfer to industry.

6 Have good social and communication skills to function in a team

7 Display good communication skills to pitch a project proposal and defend it in front of an assessment committee, composed of lecturers and student peers

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, Lecture, Independent work

Extra information on the teaching methods

Study coaching is foreseen as face to face contact during set hours or via e-mail with the main lecturer being available for addition information or clarification of the course material or task given.

Study material

None

References

Course content-related study coaching

Intensive coaching and collaboration between students, lecturers and assistants

Assessment moments

end-of-term and continuous assessment

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

Oral assessment, Peer and/or self assessment, Assignment

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

Oral assessment, Assignment

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

not applicable

Extra information on the examination methods

Students are evaluated based on their participation to the various activities (presence as well as contribution) and the submitted assignments

Calculation of the examination mark

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.