

Bachelor's Project (C003382)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size	<i>(nominal values; actual values may depend on programme)</i>			
Credits 6.0	Study time 165 h	Contact hrs	110.0 h	
Course offerings and teaching methods in academic year 2020-2021				
A (semester 2)	Dutch	Gent	bachelor's dissertation	110.0 h
Lecturers in academic year 2020-2021				
Goormachtig, Sofie		WE09	lecturer-in-charge	
Bertrand, Mathieu		WE14	co-lecturer	
Willems, Anne		WE10	co-lecturer	
Offered in the following programmes in 2020-2021			crdts	offering
Bachelor of Science in Biochemistry and Biotechnology			6	A
Linking Course Master of Science in Biochemistry and Biotechnology			6	A

Teaching languages

Dutch

Keywords

Workshop, technology, methodology, research experience in laboratory, scientific literature

Position of the course

The bachelor project aims to enable students to use the competencies they acquired during the whole bachelor program in tackling specific scientific questions or methodologies.

These competencies are: 1) to judge, perform and evaluate different techniques and methodologies in biochemistry and biotechnology, 2) to use an integrated scientific approach to solve a scientific question, 3) to use their intellectual skills to gather scientific knowledge by evaluating experimental data, seminars and scientific literature, 4) to cooperate and communicate at a scientific level, 5) to write clear and comprehensive scientific reports citing current literature, and 6) to prepare an oral presentation. The bachelor project integrate experimental work, seminars, literature study, and reporting and presentation of projects. The students will perform scientific experiments and study relevant scientific literature. At the end, the students will deliver a written report and an oral presentation, and undergo individual evaluation.

Contents

A variety of scientific issues or technologies in the fields of biochemistry and biotechnology are offered. These subjects can change from year to year. Examples of possible technologies are quantitative PCR, protein-protein interactions, transformation of plants, tissue culture techniques, yeast-two hybrid, and identification of bacteria. The students will perform experiments as much as possible individually.

Initial competences

You can download the list of prerequisites on <https://oasis.ugent.be/oasis-web/curriculum/voorkennisvancursus?cursuscode=C003382&taal=en>.

Knowledge of advanced concepts of molecular biology, cell biology, gene technology, biochemistry and microbiology are required.

Final competences

- 1 To judge, perform and evaluate different techniques and methodologies in biochemistry and biotechnology.
- 2 To use an integrated scientific approach to solve a scientific question.
- 3 To use their intellectual skills to gather scientific knowledge by evaluating experimental data, seminars and scientific literature.
- 4 To cooperate and communicate at a scientific level.
- 5 To write clear and comprehensive scientific reports citing current literature.
- 6 The student should gain the ability to perform a scientific assignment or technique under the guidance of a supervisor.
- 7 To report about it.
- 8 To gather scientific knowledge from the literature and seminars.

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Bachelor's dissertation

Extra information on the teaching methods

A study in a research laboratory, scientific literature, seminars.

Learning materials and price

Printed syllabus and scientific articles

References**Course content-related study coaching**

Short overview of the research subjects for the students. Relevant seminars with emphasis on methodology. During experimental work, scientists with expertise in the relevant fields will guide the students. The students will also be counselled in preparing reports and giving oral presentations.

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period**Examination methods in case of periodic evaluation during the second examination period****Examination methods in case of permanent evaluation**

Oral examination, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

Individual written reports, oral presentation and individual oral examination by a jury.

Calculation of the examination mark

Continuous non-periodic evaluation by the teachers of the students' experimental work (10% of exam points), oral presentation (20 % of exam points) and an written report (20 % of exam points) and an individual oral exam (50 % of exam points).

Only the individual report and/or the oral exam are subject to re-examination. The scores for the other parts of the evaluation will be retained during re-examination.