GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Design Project (C003698)

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

Credits 9.0 **Study time 270 h**

Course offerings in academic year 2025-2026

A (Year)	English	Gent

Lecturers in academic year 2025-2026

Marchal, Kathleen	WE09	lecturer-in-charge
De Meyer, Tim	LA26	co-lecturer

Offered in the following programmes in 2025-2026	crdts	offering
Bridging Programme Master of Science in Bioinformatics(main subject Engineering)	9	A
Master of Science in Bioinformatics(main subject Bioscience Engineering)	9	A
Master of Science in Bioinformatics(main subject Engineering)	9	A
Master of Science in Bioinformatics(main subject Systems Biology)	9	A

Teaching languages

English

Keywords

Interdisciplinary research and development, collaboration, communication and presentation skills

Position of the course

In the design project, students work in heterogeneous teams (different background and/or field of study) in order to create innovative solutions for bioinformatics problems. Students can create their own proposals. This course aims to sharpen both technical and intellectual skills in the field of bioinformatics and to apply theoretical knowledge from other courses to practical problems. The project involves different components: project management, requirement analysis, design and implementation, evaluation, testing and documentation. The project proposals are selected with a strong emphasis on valorization.

Contents

- Research topic selection
- Analysis of the requirements
- Experiment design (software, data)
- Detailed design and implementation
- Prototype design and evaluation
- Reporting
- Project finalization and presentation of the final project results

Initial competences

Identical to those of the Master in Bioinformatics

Final competences

1 Communication in English;
2 Basic project management skills: formulation of goals, reporting, end goals and methodological trajectory;
3 Functioning as part of team in a multidisciplinary environment and initial management skills;
4 Written, oral and graphical reporting on a technical or scientific subject;
5 Subdivision of complex problems in bioinformatics;
6 Formalization of a complex biological problem;

7 Solving part of the problem by using a combination of methods and material described in scientific literature;
8 Design and implement new concepts in an independent fashion;
9 Analysis and interpretation of results;
10 Mindset towards valorization;
11 Being able to learn new things in an independent manner, using scientific literature;

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

Study material

Type: Project

Name: Design Project slides, papers, and other information
Indicative price: Free or paid by faculty
Optional: no

References

Course content-related study coaching

- The lecturers and assistants guide the students during the project
- Feedback after intermediary presentations

Assessment moments

continuous assessment

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

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

Examination methods in case of permanent assessment

Peer and/or self assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

Assessment of the paper and the oral presentation

Calculation of the examination mark

100% permanent evaluation