

## MASTERPROEF (1001484)

**Cursusomvang** *(nominale waarden; effectieve waarden kunnen verschillen per opleiding)*

**Studiepunten 30.0**                      **Studietijd 900 u**

**Aanbodsessies en werkvormen in academiejaar 2024-2025**

A (Jaar)                      Engels                      Gent                      masterproef

**Lesgevers in academiejaar 2024-2025**

De Mey, Marjan                      LA25                      Verantwoordelijk lesgever

**Aangeboden in onderstaande opleidingen in 2024-2025**

[Master of Science in Bioscience Engineering: Cell and Gene Biotechnology](#)                      **stptn**                      **aanbodssessie**  
30                      A

**Onderwijstalen**

Engels

**Trefwoorden**

Scientific research, research techniques, scientific reporting, written manuscript, oral presentation

**Situering**

The master dissertation is an integration course that forms the final part of the master's program in which the scientific final competences are applied to the programme-specific knowledge competences

Students can choose the topic for their master's dissertation (thesis) in a broad range of disciplines in which the scientific staff of the master programs is active. In general, the students become involved in ongoing research within the research laboratories of their promoter(s).

They can however also propose their own research topic. Students have to conduct research with the appropriate expertise in order to contribute to the development of a particular research domain.

The ultimate goal is to initiate students into research at an academic level so that, upon completion of their master program, they are able to carry out scientific research in a proper way.

**Inhoud**

All information regarding the content and implementation of the master's dissertation and the rights and obligations of all those involved can be found on the portal (regulations, timetables,...): <https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/masterdissertation.htm>

A master's dissertation is the result of an extensive literature study based on scientific sources and independently conducted research. This research can be carried out in in-house laboratories or in collaboration with industry or in a scientific institution. The literature review and research deepen a domain-specific problem, map it and propose (partial) solutions. The results of the literature review and the independent research are written down in a thesis. This thesis consists at least of table of contents, abstract, introduction, literature review, materials and methods, results and a critical discussion of the results obtained. If possible, the conclusions should be based on statistical analysis. The bibliography shall refer to the international literature in the covered specific research area. The thesis and in particular the obtained results of the research are presented and defended orally before a jury.

**Begincompetenties**

The competences that can be expected from a Bachelor of Bioscience Engineering, supplemented with a thorough scientific basic knowledge and knowledge of research techniques in the field of the master of Bioscience Engineering.

## **Eindcompetenties**

- 1 Establish a well-defined research problem
- 2 Formulate clear research questions
- 3 Establish a suitable methodology in accordance with the prevailing scientific standards of the research field
- 4 Systematically collect, search, critically interpret and integrate scientific literature
- 5 Collect data in an accurate way (existing and/or obtained through personal laboratory and/or fieldwork and/or surveys)
- 6 Process data in a correct way
- 7 Analyze data critically in a scientific context
- 8 Adjust independently the research process based on feedback from experts and critical self-assessment
- 9 Summarize and present data in a concise manner
- 10 Write a report on scientific and technical information, materials and methods, results and findings, critical interpretation and decision-making
- 11 Handle a problem critically, creatively from an engineering perspective with attention for ethical, social, international and sustainability aspects
- 12 Act according to the principles and good practices of scientific integrity
- 13 Show independence, motivation, commitment, a drive for innovativeness and creativity, initiative and perseverance to achieve learning outcomes 1 to 12
- 14 Present, defend and frame the research results vis-à-vis peers and experts

## **Creditcontractvoorwaarde**

Dit opleidingsonderdeel kan niet via creditcontract gevolgd worden

## **Examencontractvoorwaarde**

Dit opleidingsonderdeel kan niet via examencontract gevolgd worden

## **Didactische werkvormen**

Masterproef

## **Studiemateriaal**

Type: Andere

Naam: Masterproef

Richtprijs: Gratis of betaald door opleiding

Optioneel: nee

Bijkomende info: Kosten zijn afhankelijk van promotor en project, en soms moeten studenten zelf bijdragen, bv. voor verplaatsingen (in binnen- en buitenland).

## **Referenties**

## **Vakinhoudelijke studiebegeleiding**

The master's dissertation is actively coached by the promotor(s) and tutor(s) during counseling meetings, during which the work as well as the ongoing learning process involved are reviewed.

Information is to be found on the portal: <https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/guidance-dissertation>

## **Evaluatiemomenten**

periodegebonden en niet-periodegebonden evaluatie

## **Evaluatievormen bij periodegebonden evaluatie in de eerste examenperiode**

Mondelinge evaluatie, Werkstuk

## **Evaluatievormen bij periodegebonden evaluatie in de tweede examenperiode**

Mondelinge evaluatie, Werkstuk

## **Evaluatievormen bij niet-periodegebonden evaluatie**

Participatie

## **Tweede examenkans in geval van niet-periodegebonden evaluatie**

Examen in de tweede examenperiode is mogelijk

## **Toelichtingen bij de evaluatievormen**

See <https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation/masterdissertationevaluation>

## **Eindscoreberekening**

(Goedgekeurd)

30 % of the evaluation for the process: scientific approach, technical elaboration, commitment, problem approach, adjustment of the research process

40 % of the evaluation for the Master's dissertation report: scientific quality, technical quality, design, structure, use of language

30 % of the evaluation for the oral defence assessment: presentation (content, structure and design) (10 %) and the answers to the questions (20 %)

Note: following deliberation the jury can defer from the calculated score. This will always be motivated.

Students who eschew periodic and/or permanent evaluations may be failed by the examiner.