

## Master's Dissertation (C002308)

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

**Credits 30.0**

**Study time 825 h**

**Course offerings and teaching methods in academic year 2025-2026**

A (Year)

Dutch

Gent

master's dissertation

**Lecturers in academic year 2025-2026**

**Offered in the following programmes in 2025-2026**

[Master of Science in Mathematics](#)

**crdts**

30

**offering**

A

**Teaching languages**

Dutch

**Keywords**

Research, report

**Position of the course**

The master education ends with a Master's Dissertation. In this dissertation, the students show that they are capable to apply the knowledge and skills he learned during his training in a concrete research project and to write a scientific thesis about it.

**Contents**

The Master's Dissertation consists of a workpiece (research project) to be performed independently by the student. The research project involves a theoretical study of a topic and/or the processing, analysis and interpretation of data, possibly accompanied by programming work or calculations with computer algebra software (such as SageMath).

After submission of the master's thesis, there is a presentation with oral defense. The research project does take place within the own faculty departments, another faculty of the UGent or another research institution (possibly abroad). For a stay abroad, a student may obtain a scholarship as part of the EU Erasmus program only if the duration of the stay is at least 2 months. For students going abroad the faculty member sending out the student is the responsible supervisor. For more information about the choice of the subjects and about the formal contents, we refer to <http://www.wiskunde.ugent.be/praktische-organisatie/bachelorproject-masterproef.php>

**Initial competences**

The final competences of the Bachelor education in mathematics.

**Final competences**

- 1 The student can translate a research problem into clear research questions and formulate research hypothesis.
- 2 The student can systematically search for scientific literature, critically analyse it and integrate it into research.
- 3 If applicable to the research, the student can accurately collect, manage, analyse and synthesise data in a correct way using appropriate methods and techniques.
- 4 The student can critically evaluate and discuss research findings, draw conclusions and suggest improvements or follow-up research.

- 5 The students can communicate in an oral form, both to specialised and wider audiences. The student can substantiate, defend and discuss these results within a scientific context.
- 6 The student can apply scientific integrity in all phases of the master's thesis and make ethical choices when collecting, analysing and communicating research data. He/she critically reflects on the possibilities and limitations of artificial intelligence and digital tools within research and uses them where relevant in a transparent and responsible manner.
- 7 The student can function independently and as part of a team within a research environment and work constructively with fellow researchers .
- 8 The student demonstrate problem-solving skills and flexibility to adjust an investigation and integrate new insights.

#### **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**

Master's dissertation, Work placement

#### **Study material**

None

#### **References**

#### **Course content-related study coaching**

#### **Assessment moments**

end-of-term and continuous assessment

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

Oral assessment

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

Oral 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 possible in modified form

#### **Extra information on the examination methods**

- <http://www.wiskunde.ugent.be/praktische-organisatie/bachelorproject-masterproef.php>
- All students are expected to consult and apply the [faculty code of conduct for the use of GenAI during the master's dissertation](#). The study programme, supervisor or promotor will communicate any deviations or additions to these faculty guidelines directly to students through the usual UGent-channels.

#### **Calculation of the examination mark**

- 75% for the process and final work
- 25% for the oral presentation and defense.

If during the oral defense it appears that the student has insufficient insight into certain passages from the final work, the grade given for the process/final work can be adjusted taking this into account. The jury also has the right to give someone a non-deliberative grade if they have not passed one of the two parts (process/final work, presentation/defense).