GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2026-2027

Master's Dissertation (C004524)

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

Credits 30.0 **Study time 900 h**

Course offerings and teaching methods in academic year 2026-2027

A (Year)	English	Gent	master's dissertation	0.0h
			work placement	0.0h

Lecturers in academic year 2026-2027

Smet, Philippe	WE04	lecturer-in-charge

Offered in the following programmes in 2026-2027	**crdts**	**offering**
Master of Science in Physics and Astronomy	30	A

Teaching languages

English

Keywords

Research in physics and/or astronomy, written and oral reporting, master thesis

Position of the course

The master's dissertation consists of a research project (research internship) through which the master's program is completed and which must therefore demostrante the knowledge and skills acquired on a master level. The student must show analytical, synthetic, and independent problem-solving abilities at an academic level. The project reflects the student's general critical-reflective attitude and research-oriented mindset.
The master's thesis involves the independent development of a research project (research internship), under the supervision of one or more advisors. Research internships include, among other things, the collection, processing, analysis, and interpretation of data. The research internship can take place within the departments of the student's own faculty, another faculty of the UGent, another research institution (possibly abroad) or a company.
For a stay abroad, a student may obtain a scholarship as part of the EU Erasmus program only if the duration of the internship is at least 2 months. For students going abroad the faculty member sending out the student is the responsible supervisor.

Contents

The subjects have a clear physical and/or astronomical scientific research question and are communicated to the students via the education board around the Easter period, in the academic year preceding the year in which the work is to be carried out. More details can be found in the document “Guidelines regarding the master's thesis” on the Master's info site.

Initial competences

The final competences of a Bachelor in Physics and Astronomy (see study guide). Sufficient relevant competencies on master level, demonstrated by acquired credits for master courses.

Final competences

1 To be able to study, independently and in team, a physical/astronomical topic and position it in a broader scientific and societal context.
2 To be able to make an international literature study in a critical way.
3 To be able to gather, preferably original, experimental, theoretical or

computational data and to summarise, analyse and interpret them critically.
4 To have good knowledge about the most important methods to independently model the physical world in a quantitative way.
5 To be able to report the results both in an oral and in a written way.
6 The ambition must be to collect publishable results.

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

Supervising PhD students, postdocs and promoter(s)

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

Professional practice, Oral assessment, Participation, Presentation, 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

See the document "Guidelines for the master thesis" on the ufora site for the Master programme. This document is released by the educational board at the start of the academic year. It contains the guidelines regarding the practical, administrative, evaluation, and feedback-related aspects of the master's thesis. This document forms an integral part of this course description.
The student, together with the promotor and/or supervisor, is responsible for ensuring that at least three progress meetings are held at different stages of the thesis process. Active participation in all three meetings is mandatory and a formal requirement for being permitted to submit the written master's thesis.
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

The final grade is determined after completing the three mandatory evaluation components (process, written thesis, and oral defence).
For the master's dissertation, this is defined as follows:
- daily activities of the student (accuracy, communication, motivation, commitment, degree of independence, mid-term presentation)
- content and the scientific and format-technical quality of the dissertation
- oral defence (presentation and response to questions).

The final grade for the master's dissertation is not necessarily the sum of all components, but is determined based on the extent to which the student has achieved the final competencies. The oral defence is essential in establishing if the student can justify both the content and the development of the thesis, and that the research process meets the requirements of scientific integrity. A student who withdraws from any of the evaluation components can no longer pass the master's dissertation.
See the faculty additions to the Education and Examination Code for all modalities.