

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 2024-2025

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

Lecturers in academic year 2024-2025

Smet, Philippe	WE04	lecturer-in-charge
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Offered in the following programmes in 2024-2025

	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

Position of the course

The Master's Dissertation consists of a research project which finalises the master and which should illustrate the acquired knowledge and skills. The student demonstrates an analytical, synthesizing and autonomous problem-solving capacity on an academic level. With this project the student proves his/her general critical-reflexive and research attitude.

The research project involves the collecting, processing, analysis and interpretation of data. The research project does take place within the own faculty departments, 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 topics concern a physical and/or astronomical scientific problem and are announced to the students around Easter by the Physics and Astronomy Education Board via the Ufora Master-infosite.

Initial competences

The final competences of a Bachelor in Physics and Astronomy (see study guide)

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

end-of-term assessment

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

Oral assessment, Assignment

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

Oral assessment, Assignment

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

Extra information on the examination methods

- See document "Master thesis regulations" on the Ufora infosite for the Master in Physics and Astronomy.
- 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

40% of the score is related to the daily activities of the student (accuracy, communication, motivation, drive, degree of independence)

40% of the score is based on the scientific and format-technical quality of the dissertation.

20% of the score is based on the oral defence (presentation and response to questions).