

Study Programme

Academic year 2024-2025

Master of Science in Physics and Astronomy

Language of instruction: Dutch

Programme version 17

I General Courses 55 credits

Full-time standard learning track: Students can choose which of these course units will be taken in the first respectively the second year of study; together with the elective courses, a total of 60 credits is taken in the first and a total of 30 credits in the second year of study.

1.1 General Courses 36 credits

Nr	Course		CRDT Ref MT1	Session	Study
1	C004503	Solid State and Nano Physics [en] Christophe Detavernier Department of Solid State Sciences	6	A:1	180
2	C004504	Computational Physics [en] Toon Verstraelen Department of Physics and Astronomy	6	A:1	180
3	C004502	Subatomic Physics [en] Ben Page Department of Physics and Astronomy	6	A:1	180
4	C004505	Theoretical and Numerical Astrophysics [en] Maarten Baes Department of Physics and Astronomy	6	A:1	180
5	C004506	Quantum Field Theory [en] Thomas Mertens Department of Physics and Astronomy	6	A:1	180
6	C004451	General Relativity [en] Archisman Ghosh Department of Physics and Astronomy	6	A:1	180

1.2 Professional Skills 19 credits

Nr	Course		CRDT Ref M	T1 Session	Study
1	C004559	Internship	15	A:J	450
		Matthieu Boone Department of Physics and Astronomy			
2	C004519	Professional Skills for Scientists [en, nl]	4	(A:J) ^c	120
		Philippe Smet Department of Solid State Sciences			

2 Elective Courses 35 credits

Subscribe to 35 credit units from no less than 1 and no more than 3 modules from the following list. Subject to approval by the faculty.

2.1 Elective Courses Physics & Astronomy

Subscribe to no less than 24 credit units from the elective course lists 2.1 through 2.5 from the MSc in Physics & Astronomy (English taught programme).

Please note: some elective courses are offered every two years or require specific initial competences. Keep this in mind when choosing your elective courses.

2.2 Elective Courses Society, Sustainability and Economy

Subscribe to no more than 11 credit units from the elective course list 2.7 from the MSc in Physics & Astronomy (English taught programme).

2.3 Elective Courses UGent or other Universities

Subscribe to courses for no more than 11 credit units to be chosen from the Bachelor and/or Master courses of UGent including the Ghent University elective courses, or from an Erasmus+ partner university.

3 Master's Dissertation 30 cred					
Nr Course	CRDT	Ref MT1	Session	Study	
1 C002315 Master's Dissertation	30	2	A:J	900	

17-07-2025 06:33 p 1

Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the cours name, using the following ISO codes:

bg: Bulgarian de: German es: Spanish ja: Japanese pl: Polish sh: Kroatian/Serbian zh: Chinese

cs: Czech el: Greek fr: French nl: Dutch pt: Portuguese sl: Slovene da: Danish en: English it: Italian no: Norwegian ru: Russian sv: Swedish

Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course in not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually c: annually, from 2025-2026 f: annually, from 2026-2027 i: annually, from 2027-2028 b: tri-annually d: bi-annually, from 2025-2026 g: bi-annually, from 2026-2027 j: bi-annually, from 2027-2028 h: tri-annually, from 2026-2027 k: tri-annually, from 2027-2028

17-07-2025 06:33 p 2