

Master of Science in Physics and Astronomy

Language of instruction: Dutch

Programme version 17

1 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] <i>Christophe Detavernier -- Department of Solid State Sciences</i>	6			A:1	180
2	C004504 Computational Physics [en] <i>Toon Verstraelen -- Department of Physics and Astronomy</i>	6			A:1	180
3	C004502 Subatomic Physics [en] <i>Didar Dobur -- Department of Physics and Astronomy</i>	6			A:1	180
4	C004505 Theoretical and Numerical Astrophysics [en] <i>Maarten Baes -- Department of Physics and Astronomy</i>	6			A:1	180
5	C004506 Quantum Field Theory [en] <i>Thomas Mertens -- Department of Physics and Astronomy</i>	6			A:1	180
6	C004451 General Relativity [en] <i>Archisman Ghosh -- Department of Physics and Astronomy</i>	6			A:1	180

1.2 Professional Skills 19 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C004559 Internship <i>Christophe Detavernier -- Department of Solid State Sciences</i>	15			A:J	450
2	C004519 Professional Skills for Scientists [en, nl] <i>Philippe Smet -- Department of Solid State Sciences</i>	4			A:J	120

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 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C002315 Master's Dissertation <i>Philippe Smet -- Department of Solid State Sciences</i>	30		2	A:J	900

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 course name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Croatian/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 is 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 2026-2027	f: annually, from 2027-2028	i: annually, from 2028-2029
b: tri-annually	d: bi-annually, from 2026-2027	g: bi-annually, from 2027-2028	j: bi-annually, from 2028-2029
	e: tri-annually, from 2026-2027	h: tri-annually, from 2027-2028	k: tri-annually, from 2028-2029