

Bachelor of Science in Physics and Astronomy (v9)

Language of instruction Dutch

Valid as from the academic year 2018-2019

1 General Courses

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Mechanics	Matthieu Boone WE05	6		1	1	1	52.5	180
2	Waves and Optics	Henk Vrielinck WE04	6		1	2	2	52.5	180
3	Electricity and Magnetism	Bartel Van Waeyenberge WE04	6		1	2	2	52.5	180
4	Introduction to Theoretical Physics	Dimitri Van Neck WE05	6		1	2	2	52.5	180
5	Physics Laboratory 1	Natalie Jachowicz WE05	6		1	1	1	60	180
6	Analysis I	Jasson Vindas Diaz WE16	6		1	1	1	67.5	180
7	Analysis II	Dixan Peña Peña WE16	6		1	2	2	52.5	180
8	Linear Algebra and Geometry I	Andreas Weiermann WE16	6		1	1	1	60	180
9	Programming	Peter Dawyndt WE02	6		1	1	1	60	180
10	Chemistry	Kristof Van Hecke WE06	6		1	2	2	52.5	180
11	Quantum Mechanics 1	Jan Ryckebusch WE05	6		2	3	1	52.5	180
12	Thermal Physics	Natalie Jachowicz WE05	6		2	4	2	52.5	180
13	Electromagnetism	Jutho Haegeman WE05	6		2	4	2	45	180
14	Material Physics	Freddy Callens WE04	6		2	4	1	52.5	180
15	Physics Laboratory 2	Bartel Van Waeyenberge WE04	6		2	3	2	60	180
16	Statistics and Data Processing	Ilse De Looze WE05	6		2	3	1	52.5	180
17	Mathematical Methods in Physics	Hans Dierckx WE05	6		2	3	1	60	180
18	Introduction to Astronomy	Sven De Rijcke WE05	6		2	3	1	52.5	180
19	Extragalactic Astronomy	Maarten Baes WE05	6		2	4	2	52.5	180
20	Quantum Mechanics 2	Henri Verschelde WE05	6		3	5	1	52.5	180
21	Theory of Relativity	Karel Van Acoleyen WE05	6		3	5	1	52.5	180
22	Statistical Physics 1	Jan Ryckebusch WE05	6		3	5	1	52.5	180
23	Introduction to Atomic and Molecular Physics	Philippe Smet WE04	6		3	5	1	52.5	180
24	Solid State Physics	Christophe Detavernier WE04	6		3	6	2	52.5	180
25	Subatomic Physics 1 [en]	Didar Dobur WE05	6		3	6	2	52.5	180
26	Physics of Galaxies	Sven De Rijcke WE05	6		3	6	2	52.5	165
27	Bachelorproject	Christophe Detavernier WE04	6		3	6	2	60	180

2 Elective Courses

Subscribe to 1 module from the following list. Subject to approval by the faculty.

Students who have followed the Educational Track, can enter directly into the educational master's programme.

2.1 Physics and Astronomy Track

Subscribe to 18 credit units from no less than 1 and no more than 2 modules from the following list.

2.1.1 Elective Courses Physics and Astronomy

Subscribe to no more than 18 credit units from the following list, distributed over the first standard learning path as follows:

- no more than 6 credit units in year 2,
- no more than 12 credit units in year 3.

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Electronics	Dirk Poelman WE04	6		2	2		52.5	180

2	Thin Films and Surface Physics	Diederik Depla WE04	6	3	1	52.5	180
3	Introductory Biophysics [en]	Alexander Panfilov WE05	6	3	1	52.5	180

2.1.2 Elective Courses UGent

Subscribe to no more than 18 credit units from the bachelor's programmes offered by UGent. The course units are preferably chosen from the course units offered by the Faculty of Sciences and / or the Faculty of Engineering and Architecture. The course 'Powerful Learning Environments' from the educational track can also be chosen here. At most 6 credits can be chosen from course units offered by other faculties. The course units are distributed over the first standard learning path as follows:

- 6 credit units in year 2,
- no more than 12 credit units in year 3.

2.2 Educational Track

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Powerful Learning Environments	Bram De Wever PP06	6		2		1	40	180
2	Teaching Methodology: Sciences	Katrien Strubbe WE06	6		3		J	40	180
3	Reference Internship: Sciences	Katrien Strubbe WE06	3		3		J	90	90

2.2.1 Elective Courses UGent

Subscribe to 3 credit units from the module 'Physics and Astronomy' or from the bachelor's programmes offered by Ghent University (preferably offered by the Faculty of Sciences and / or the Faculty of Engineering and Architecture).

Teaching languages

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 2019-2020	f: annually, from 2020-2021	i: annually, from 2021-2022
b: tri-annually	d: bi-annually, from 2019-2020	g: bi-annually, from 2020-2021	j: bi-annually, from 2021-2022
	e: tri-annually, from 2019-2020	h: tri-annually, from 2020-2021	k: tri-annually, from 2021-2022