GHENT UNIVERSITY

Study Programme

Academic year 2024-2025

Faculty of Sciences

Exchange Programme in Physics and Astronomy (Master's Level)

Language of instruction: English

Programme version 7

1 General Courses

The exchange programme contains a preferred list of English courses taught at UGent of the Master of Science in Physics and Astronomy.
Tips for completing your Learning Agreement:

- Please check the departmental rules for incoming students.
- A minimum number of 20 ECTS per semester (or 40 ECTS per year) should be chosen.
- Students who want to perform a research project have to contact a promotor and have his/her preliminary agreement before submitting an application and learning agreement.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003120	Physics and Chemistry of Nanostructures Zeger Hens -- Department of Chemistry	6			B:2	180
2	C003122	Nuclear Methods in Material Research Stefaan Cottenier -- Department of Electromechanical, Systems and Metal Engineering	6			A:2	180
3	C003123	Nuclear Instrumentation Luc Van Hoorebeke -- Department of Physics and Astronomy	6			A:1	180
4	C002676	Continuum Mechanics Geert Verdoolaege -- Department of Applied Physics	6				180
5	C004450	Medical Radiation Physics and Dosimetry Klaus Bacher -- Department of Human Structure and Repair	6			A:2	180
6	C003127	Capita Selecta Solid-state Physics Henk Vrielinck -- Department of Solid State Sciences	6				180
7	C003128	Optical Spectroscopy of Materials Dirk Poelman -- Department of Solid State Sciences	4			A:1	120
8	C003668	Quantum Computing Frank Verstraete -- Department of Physics and Astronomy	6				180
9	C003129	Capita Selecta Particle Physics Didar Dobur -- Department of Physics and Astronomy	6			A:2	180
10	C003208	Luminescence Jonas Joos -- Department of Solid State Sciences	6				180
11	E076460	Dare to Venture Johan Verrue -- Department of Marketing, Innovation and Organisation	4			A:2	120
12	C003939	Radiative Transfer Simulations in Astrophysics Maarten Baes -- Department of Physics and Astronomy	6			(A:2)[d]	180
13	C004071	Strongly Correlated Quantum Systems Jutho Haegeman -- Department of Physics and Astronomy	6			A:2	180
14	E006800	Modelling and Engineering of Nanoscale Materials Louis Vanduyfhuys -- Department of Applied Physics	6			A:1	180
15	C004106	Complexity and Criticality Jan Ryckebusch -- Department of Physics and Astronomy	6			A:2	180
16	E026221	Plasma Physics Geert Verdoolaege -- Department of Applied Physics	6			A:1	180
17	E006900	Plasma Technology and Fusion Technology Rino Morent -- Department of Applied Physics	6			A:1	180
18	C004105	Nanomagnetism Bartel Van Waeyenberge -- Department of Solid State Sciences	6			A:1, B:2	180

19	C003758	Machine Learning Yvan Saeys -- Department of Applied Mathematics and Computer Science	6	A:1	180
20	C004421	Relativistic Hydrodynamics - from Quantum Field Theory to Black Holes Michal Heller -- Department of Physics and Astronomy	6	A:1[a]	180
21	C004451	General Relativity Archisman Ghosh -- Department of Physics and Astronomy	6	A:1	180
22	C003242	Research Project	0	A:1, C:J, B:2	0

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
	e: tri-annually, from 2025-2026	h: tri-annually, from 2026-2027	k: tri-annually, from 2027-2028