Study Programme

Academic year 2022-2023

Faculty of Sciences

Bachelor of Science in Mathematics

Language of instruction: Dutch

Programme version 14

1 General Courses — 156 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003554	Linear Algebra and Geometry I	6		1	A:1	180
		Anneleen De Schepper -- Department of Mathematics: Algebra and Geometry					
2	C003574	Analysis I	6		1	A:1	180
		Jasson Vindas Diaz -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
3	C003550	Discrete Mathematics I	6		1	A:1	180
		Leo Storme -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
4	C003770	Programming	6		1	A:1	180
		Kris Coolsaet -- Department of Applied Mathematics and Computer Science					
5	C003552	Computer Project Mathematics	4		1	A:1	100
		Tom De Medts -- Department of Mathematics: Algebra and Geometry					
6	C003555	Linear Algebra and Geometry II	6		1	A:2	165
		Hendrik Van Maldeghem -- Department of Mathematics: Algebra and Geometry					
7	C003575	Analysis II	8		1	A:2	200
		Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
8	C003551	Discrete Mathematics II	6		1	A:2	165
		Bart De Bruyn -- Department of Mathematics: Algebra and Geometry					
9	C004210	Theoretical Mechanics	6		1	A:2	180
		Dimitri Van Neck -- Department of Physics and Astronomy					
10	C003607	General Physics	6		1	A:2	165
		Henk Vrielinck -- Department of Solid State Sciences					
11	C003557	Algebra I	6		2	A:1	180
		Tom De Medts -- Department of Mathematics: Algebra and Geometry					
12	C003568	Complex Analysis	6		2	A:1	165
		Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
13	C002794	Algorithms and Data Structures	6		2	A:1	165
		Veerle Fack -- Department of Applied Mathematics and Computer Science					
14	C003558	Statistics I	6		2	A:1	165
		Stijn Vansteelandt -- Department of Applied Mathematics and Computer Science					
15	C004420	Differential Geometry	6		2	A:2	165
		Frederik Broucke -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
16	C003569	Topology and Metric Spaces	6		2	A:2	180
		Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics					
17	C003608	Numerical Analysis	6		2	A:2	165
		Joris Van der Jeugt -- Department of Applied Mathematics and Computer Science					
18	C003559	Statistics II: Project	6		2	A:2	165
		Martial Luyts -- Department of Applied Mathematics and Computer Science					
19	C000313	Projective Geometry	6		3	A:1	165
		Bart De Bruyn -- Department of Mathematics: Algebra and Geometry					
20	C003570	Function Spaces	6		3	A:1	180
		Hendrik De Bie -- Department of Electronics and Information Systems					
21	C003563	Optimisation	6		3	A:1	165
		Veerle Fack -- Department of Applied Mathematics and Computer Science					

22	C003560	Statistics III: Regression Analysis [en, nl]	6	3	A:1	165
		Stijn Vansteelandt -- Department of Applied Mathematics and Computer Science				
23	C004110	Algebra II	6	3	A:2	180
		Tom De Medts -- Department of Mathematics: Algebra and Geometry				
24	C003562	Logic	6	3	A:2	165
		Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete Mathematics				
25	C004010	Mathematical Modeling	6	3	A:2	180
		Marnix Van Daele -- Department of Applied Mathematics and Computer Science				
26	C003573	Bachelor Project	6	3	A:2	165
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2 Minors   18 credits

Subscribe to 1 minor from the following list. Subject to approval by the faculty.
Students who have followed the Minor Education, can enter directly into the educational master's programme.

2.1 Minor Life Sciences

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:
• 12 credit units in year 2,
• 6 credit units in year 3.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003625	Population Processes	6			A:1	180
		Luc Lens -- Department of Biology					
2	C003390	Introduction to Life Sciences	6			A:2	165
		Peter Vandenabeele -- Department of Molecular Biology					
3	C001479	Introduction to Bioinformatics	6			A:2	165
		Kathleen Marchal -- Department of Plant Biotechnology and Bioinformatics					

2.2 Minor Economics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:
• 12 credit units in year 2,
• 6 credit units in year 3.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000758	Economics	6			A:1	165
		Bruno Merlevede -- Department of Economics					
2	F000804	Financial Mathematics	6			A:2	180
		Michèle Vanmaele -- Department of Applied Mathematics and Computer Science					
3	F000446	Markets and Prices	6			A:1	180
		Dirk Van de gaer -- Department of Economics					
4	C002995	Game Theory	6			A:1	165
		Dirk Van de gaer -- Department of Economics					

2.3 Minor Informatics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:
• 12 credit units in year 2,
• 6 credit units in year 3.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	E018110	Databases	6			A:1	180
		Guy De Tré -- Department of Telecommunications and Information Processing					
2	C003772	Object Oriented Programming	6			A:2	180
		Kris Coolsaet -- Department of Applied Mathematics and Computer Science					
3	C003777	Algorithms and Data Structures 2	6			A:1	180
		Gunnar Brinkmann -- Department of Applied Mathematics and Computer Science					
4	C003776	System Programming	6			A:1	180
		Filip De Turck -- Department of Information Technology					

2.4 Minor Physics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:
• 12 credit units in year 2,
• 6 credit units in year 3.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C002240	Quantum Mechanics 1	6			A:1	180
		Jan Ryckebusch -- Department of Physics and Astronomy					
2	C004206	Stars and Planets	6			A:2	180
		Sven De Rijcke -- Department of Physics and Astronomy					

Nr	Course		CRDT	Ref	MT1	Session	Study
3	C002245	Quantum Mechanics 2 Dimitri Van Neck -- Department of Physics and Astronomy	6			A:1	180
4	C004214	Galaxies Ilse De Looze -- Department of Physics and Astronomy	6			A:2	180
5	C004216	Relativity and Electromagnetism [en] Archisman Ghosh -- Department of Physics and Astronomy	6			A:2	180

2.5 Minor Education

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:
• 12 credit units in year 2,
• 6 credit units in year 3.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	H002169	Powerful Learning Environments Bram De Wever -- Department of Educational Studies	6	2		A:1	180
2	H002175	Teaching Methodology: Sciences Katrien Strubbe -- Department of Chemistry	6	3		A:J	180
3	H002170	Reference Internship: Sciences Katrien Strubbe -- Department of Chemistry	3	2		A:J	90
4	C004093	Mathematical Skills and Know-how Koen Thas -- Department of Mathematics: Algebra and Geometry	3	2		A:2	85

3 Elective Courses   6 credits

3.1 Elective courses Flemish Community

Subscribe to 6 credit units from the study programmes of UGent or from other Flemish universities, distributed over the first standard learning path as follows: 6 credit units in year 3. Subject to approval by the faculty.

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 2023-2024	f: annually, from 2024-2025	i: annually, from 2025-2026
b: tri-annually	d: bi-annually, from 2023-2024	g: bi-annually, from 2024-2025	j: bi-annually, from 2025-2026
	e: tri-annually, from 2023-2024	h: tri-annually, from 2024-2025	k: tri-annually, from 2025-2026