



Faculty of Sciences

Bachelor of Science in Biochemistry and Biotechnology

Language of instruction: Dutch

Programme version 14

1 General Courses						144 credits	
Nr	Course		CRDT	Ref	MT1	Session	Study
1	C000514	Mathematics I <i>Koen Thas -- Department of Mathematics: Algebra and Geometry</i>	5		1	A:1	142
2	C001837	Mathematics II <i>Koen Thas -- Department of Mathematics: Algebra and Geometry</i>	5		1	A:2	142
3	C000057	Physics I <i>Bartel Van Waeyenberge -- Department of Solid State Sciences</i>	5		1	A:1	150
4	C000673	Physics II <i>Bartel Van Waeyenberge -- Department of Solid State Sciences</i>	5		1	A:2	150
5	C004091	General Chemistry <i>Isabel Van Driessche -- Department of Chemistry</i>	10		1	A:J	284
6	C003943	Chemical Structures <i>Zeger Hens -- Department of Chemistry</i>	5		1	A:1	134
7	C003481	Biodiversity of Plants s.L. (sensu Linnaeo) <i>Annemieke Verbeken -- Department of Biology</i>	5		1	A:1	138
8	C003761	Biodiversity of Animals <i>Tom Moens -- Department of Biology</i>	5		1	A:2	138
9	C003945	General Cell Biology <i>Geert Berx -- Department of Molecular Biology</i>	5		1	A:1	140
10	C003944	General Biochemistry: Molecules of Life <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	5		1	A:2	125
11	C003390	Introduction to Life Sciences <i>Peter Vandenameele -- Department of Molecular Biology</i>	5		1	A:2	150
12	C004408	Introduction to Biostatistics <i>Lieven Clement -- Department of Mathematics, Computer Science and Statistics</i>	5		2	A:1	138
13	C001815	Organic Chemistry: Introduction to Reactivity <i>Johan Winne -- Department of Organic Chemistry</i>	5		2	A:1	148
14	C002140	Analytical Chemistry <i>Mieke Adriaens -- Department of Chemistry</i>	5		2	A:1	149
15	C003361	General Microbiology <i>Peter Vandamme -- Department of Biochemistry, Physiology and Microbiology</i>	4		2	A:1	107
16	C003362	Molecular Biology I <i>Wim Declercq -- Department of Molecular Biology</i>	4		2	A:1	117
17	C003080	Programming <i>Peter Dawyndt -- Department of Mathematics, Computer Science and Statistics</i>	5	UKV	2	B:1	150
18	C003364	Integrated Practicum: Basic Analysis of Microbial and Eukaryotic Cells <i>Peter Vandamme -- Department of Biochemistry, Physiology and Microbiology</i>	3		2	A:1	75
19	C000227	Plant Physiology <i>Dominique Van Der Straeten -- Department of Biology</i>	5		2	A:2	145
20	C002369	Biomedical Physiology <i>Dirk de Graaf -- Department of Biochemistry, Physiology and Microbiology</i>	5		2	A:2	145

21	C003365	Biochemistry: Metabolism I <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	4	2	A:2	105
22	C003366	Gene Technology I <i>Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics</i>	4	2	A:2	110
23	C003367	Genetics I <i>Sofie Goormachtig -- Department of Plant Biotechnology and Bioinformatics</i>	4	2	A:2	120
24	C003946	Integrated Practicum: Basic Biotechnology <i>Wim Declercq -- Department of Molecular Biology</i>	3	2	A:2	90
25	C003379	Immunology <i>Martin Guilliams -- Department of Molecular Biology</i>	4	2	A:2	109
26	C003369	Biochemistry: Metabolism II <i>Leander Meuris -- Department of Biochemistry, Physiology and Microbiology</i>	4	3	A:1	107
27	C003370	Molecular Biology II <i>Rudi Beyaert -- Department of Molecular Biology</i>	4	3	A:1	105
28	C004096	Molecular Cell Biology [en] <i>Roosmarijn Vandenbroucke -- Department of Molecular Biology</i>	5	3	A:1	130
29	C003372	Genetics II <i>Wout Boerjan -- Department of Plant Biotechnology and Bioinformatics</i>	4	3	A:1	120
30	C003375	Integrated Practicum: Advanced Biotechnology, Part I <i>Daniël Van Damme -- Department of Plant Biotechnology and Bioinformatics</i>	3	3	A:1	75
31	C003376	Microbial Evolution and Diversity <i>Peter Vandamme -- Department of Biochemistry, Physiology and Microbiology</i>	4	3	A:1	108

2 Elective Courses

36 credits

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 Research Track

Subscribe to 4 credit units from 1 module from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C004097	Analytical Biochemistry [en, nl] <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	3		3	A:1	90
2	C003374	Integrated Practicum: Biochemistry-Microbiology <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	3		3	A:1	90
3	C003377	Plant Molecular Biology <i>Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics</i>	4		3	A:2	109
4	C003762	Developmental Biology <i>Kris Vleminckx -- Department of Molecular Biology</i>	4		3	A:2	109
5	C004092	Bioinformatics I [en] <i>Kathleen Marchal -- Department of Plant Biotechnology and Bioinformatics</i>	4		3	A:2	120
6	C003378	Gene Technology II <i>Geert Berx -- Department of Molecular Biology</i>	4		3	A:2	115
7	C003763	Integrated Practicum: Advanced Biotechnology, Part II <i>Jonathan Maelfait -- Department of Molecular Biology</i>	4		3	A:2	100
8	C003382	Bachelor's Project <i>Mathieu Bertrand -- Department of Molecular Biology</i>	6		3	A:2	165

2.1.1 Elective Course List

Subscribe to no less than 4 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C002668	Scientific Communication in English [en] <i>Geert Jacobs -- Department of Linguistics</i>	5		3	A:2	150
2	C004395	Professional Literature [en] <i>Mathieu Bertrand -- Department of Molecular Biology</i>	4		3	A:2	120

2.1.2 Elective Courses UGent

Subscribe to 4 credit units from the bachelor's programmes of UGent, distributed over the first standard learning path as follows: 4 credit units in year 3.

2.2 Educational Track

Nr	Course		CRDT	Ref	MT1	Session	Study
1	H002169	Powerful Learning Environments <i>Bram De Wever -- Department of Educational Studies</i>	6		3	A:1	180
2	H002175	Teaching Methodology: Sciences <i>Katrien Strubbe -- Department of Chemistry</i>	6		3	A:J	180
3	H002170	Reference Internship: Sciences <i>Katrien Strubbe -- Department of Chemistry</i>	3		3	A:J	90
4	C004092	Bioinformatics I [en] <i>Kathleen Marchal -- Department of Plant Biotechnology and Bioinformatics</i>	4		3	A:2	120
5	C003378	Gene Technology II <i>Geert Berx -- Department of Molecular Biology</i>	4		3	A:2	115
6	C003763	Integrated Practicum: Advanced Biotechnology, Part II <i>Jonathan Maelfait -- Department of Molecular Biology</i>	4		3	A:2	100
7	C003382	Bachelor's Project <i>Mathieu Bertrand -- Department of Molecular Biology</i>	6		3	A:2	165

2.2.1 Elective Courses Biochemistry and Biotechnology

Subscribe to 4 credit units from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003377	Plant Molecular Biology <i>Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics</i>	4		3	A:2	109
2	C003762	Developmental Biology <i>Kris Vleminckx -- Department of Molecular Biology</i>	4		3	A:2	109

2.3 Research-Internationalisation Track (GUGC, South-Korea)

1st semester courses are taught at UGent.

2nd semester courses are taught at GUGC (South-Korea).

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C004097	Analytical Biochemistry [en, nl] <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	3		3	A:1	90
2	C003374	Integrated Practicum: Biochemistry-Microbiology <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	3		3	A:1	90
3	O000180	Bioinformatics 2 [en] <i>Zhen Li -- Department of Plant Biotechnology and Bioinformatics</i>	5		3	A:2	150
4	O000145	Plant Biotechnology [en] <i>Godelieve Gheysen -- Department of Biotechnology</i>	4		3	A:2	108
5	O000024	Economics and Marketing [en] <i>Christine Yung Hung -- Department of Agricultural Economics</i>	5		3	A:2	150
6	O000165	Bachelor's Project [en] <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	12		3	B:2	360

2.3.1 Elective Course List

Subscribe to 1 courses from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003762	Developmental Biology <i>Kris Vleminckx -- Department of Molecular Biology</i>	4		3	A:2	109
2	C003377	Plant Molecular Biology <i>Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics</i>	4		3	A:2	109
3	O000168	Experimental Food Biochemistry [en] <i>Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	5		3	A:2	150
4	O000167	Reflection on Sustainable Development [en]	5		3	A:2	125

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 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