GHENT UNIVERSITY

Study Programme

Academic year 2021-2022

Faculty of Sciences

Bachelor of Science in Chemistry

Language of instruction: Dutch

Programme version 4

1 General Courses 150 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C001541	Mathematics I: Fundamental Methods	5		1		125
2	C002691	Physics 1: Mechanics	5		1		138
3	C002608	Chemistry I: Structure of Matter	5		1		142
4	C003177	Cell Biology and Genetics *Geert De Jaeger -- Department of Plant Biotechnology and Bioinformatics*	5		1		125
5	C000509	Introduction to Organic Structures	5		1		134
6	C003080	Programming *Peter Dawyndt -- Department of Mathematics, Computer Science and Statistics*	5		1	B:1	150
7	C001434	Mathematics II: Fundamental Methods in Mathematics and Statistics	5		1		150
8	C001782	Physics II: Waves, Optics and Thermodynamics	5		1		125
9	C002609	Chemistry II: Changes in Matter	5		1		142
10	C001281	Ecology	5		1		136
11	C002078	Geology: System Earth	5		1		128
12	C000127	Chemistry, Society and Ethics	5		1		128
13	C001266	Applied Mathematics for Chemists	5		2		150
14	C002132	Electromagnetism	5		2		125
15	C002119	Inorganic Chemistry: Basic Principles	5		2		125
16	C003078	Physical Chemistry I : Chemical Thermodynamics	5		2	A:2	150
17	C001785	Organic Chemistry: Reactivity 1	5		2		128
18	C000914	Analytical Chemistry: Principles	5		2		140
19	C001786	Organic Chemistry: Reactivity 2	5		2		128
20	C001416	General Biochemistry: Proteins	5		2		125
21	C001600	Quantum Chemistry	5		2	A:2	132
22	C001321	Structural Analysis	5		2		132
23	C001787	Organic Chemistry: Reactivity 3	5		2		128
24	C000452	Spectroscopic Methods of Analysis	5		2		145
25	C001125	Quality Assurance, Healthcare and Environmental Protection in the Chemical Industry	5		3		135
26	C000621	Introduction to Polymer Science *Filip Du Prez -- Department of Organic Chemistry*	5		3	A:1	125
27	C001587	Chemical Bond	5		3	A:1	132
28	C003079	Physical Chemistry II: Electrochemistry, Chemical Kinetics *Katrien Strubbe -- Department of Chemistry*	5		3	A:1	150
29	C002956	Synthetic Methods in Organic Chemistry [en] *Johan Van der Eycken -- Department of Organic Chemistry*	5		3	A:1	148
30	C002957	Analytical Separation Methods	5		3		125

2 Elective Courses 30 credits

Subscribe to 1 module from the following list.

2.1 Majors — 30 credits

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

2.1.1 Major Research Profile — 30 credits

Subscribe to 6 credit units from no less than 1 and no more than 2 modules from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C000030	Radiochemistry	3		3		84
2	C002354	Electrochemical Analysis Methods	3		3		75
3	C002074	Crystal Chemistry *Diederik Depla -- Department of Solid State Sciences*	3		3	A:2	84
4	C002355	Bachelor Project	15		3		405

2.1.1.1 Elective Course List

Subscribe to courses for no more than 6 credit units to be chosen from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	F000845	Business Administration *Mirjam Knockaert -- Department of Marketing, Innovation and Organisation*	4		3	A:2	120
2	C000291	Commercial Law *Diederik Bruloot -- Department of Interdisciplinary Study of Law, Private Law and Business Law*	3		3		90
3	C002668	Scientific Communication in English [en] *Geert Jacobs -- Department of Linguistics*	5		3	A:2	150
4	C000713	Molecular Genetic Principles of Biotechnology	3		3		90
5	C002266	Geochemistry	5		3		150

2.1.1.2 Elective Courses UGent

Subscribe to no more than 6 credit units from the study programmes of UGent, distributed over the first standard learning path as follows: no more than 6 credit units in year 3, and over the second standard learning path as follows: no more than 6 credit units in year 6.

2.1.2 Major Interdisciplinary Profile — 30 credits

Subscribe to 15 credit units from no less than 1 and no more than 2 modules from the following list.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003244	Bachelor Project	15		3		405

2.1.2.1 Elective Courses UGent

Subscribe to no more than 15 credit units to be chosen from other study programmes of the faculty of Science, faculty of Pharmaceutical Sciences or faculty of (Bioscience) Engineering allowing a focus on another discipline of natural sciences, distributed over the first standard learning path as follows: no more than 15 credit units in year 3, and over the second standard learning path as follows: no more than 15 credit units in year 6.

2.1.2.2 Elective Courses of an University of the Flemish Community

Subscribe to no more than 15 credit units to be chosen from the study programme from another university of the Flemish Community or from the study programme from another university college allowing a focus on another discipline of natural sciences, distributed over the first standard learning path as follows: no more than 15 credit units in year 3, and over the second standard learning path as follows: no more than 15 credit units in year 6.

2.1.3 Major Education — 30 credits

Courses with reference a are part of the Specific Teacher Training Programme in Chemistry.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	H001806	Teaching Methodology: Sciences	4	a	3	A:2	120
2	C003571	Big Ideas in Natural Sciences	4		3		120
3	C002355	Bachelor Project	15		3		405

2.1.3.1 Elective Courses UGent

Subscribe to 7 credit units from the study programmes of UGent, distributed over the first standard learning path as follows: 7 credit units in year 3, and over the second standard learning path as follows: 7 credit units in year 6.

2.2 International Exchange — 30 credits

Subscribe to 30 credit units to be chosen from the study programmes of another European institute for higher education, including a Bachelor Project that will be completed abroad, distributed over the first standard learning path as follows: 30 credit units in year 3, and over the second standard learning path as follows: 30 credit units in year 6. Subject to approval by the faculty.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003619	Study Programme Abroad [en, nl] *Anna Kaczmarek -- Department of Chemistry*	30		3	A:2	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 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 2022-2023	f: annually, from 2023-2024	i: annually, from 2024-2025
b: tri-annually	d: bi-annually, from 2022-2023	g: bi-annually, from 2023-2024	j: bi-annually, from 2024-2025
	e: tri-annually, from 2022-2023	h: tri-annually, from 2023-2024	k: tri-annually, from 2024-2025