

Faculty of Sciences

Bachelor of Science in Chemistry

Language of instruction: Dutch

Programme version 9

## 1 General Courses

150 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003963 General Chemistry <i>Klaartje De Buysser -- Department of Chemistry</i>	9		1	A:J	240
2	C003964 Chemical Structures <i>Zeger Hens -- Department of Chemistry</i>	9		1	A:J	260
3	C004113 Mathematics: Basic Concepts <i>David Vyncke -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:1	180
4	C004114 Mathematics: Advanced Techniques <i>Marnix Van Daele -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:2	180
5	C003967 Physics: Mechanics <i>Matthieu Boone -- Department of Physics and Astronomy</i>	4		1	A:1	120
6	C003968 Physics: Waves, Optics and Thermodynamics <i>Pieter Geiregat -- Department of Chemistry</i>	5		1	A:2	135
7	C003080 Programming <i>Peter Dawyndt -- Department of Mathematics, Computer Science and Statistics</i>	5	UKV	1	A:1	150
8	C003944 General Biochemistry: Molecules of Life <i>Bart Devreese -- Department of Biochemistry, Physiology and Microbiology</i>	5		1	A:2	125
9	C004544 Chemistry in a Sustainable Society <i>Frederic Lynen -- Department of Organic Chemistry</i>	6		1	A:J	180
10	C003970 Experimentation in Chemistry 1 <i>Klaartje De Buysser -- Department of Chemistry</i>	5		1	A:J	125
11	C003971 Chemical Thermodynamics <i>Zeger Hens -- Department of Chemistry</i>	5		2	A:1	150
12	C003972 Electronic Structure <i>Patrick Bultinck -- Department of Chemistry</i>	5		2	A:1	135
13	C003973 Symmetry and Spectroscopy <i>Patrick Bultinck -- Department of Chemistry</i>	5		2	A:2	135
14	C003974 Inorganic Chemistry [en] <i>Steven Nolan -- Department of Chemistry</i>	3		2	A:2	90
15	C003975 Structural Analysis <i>José Martins -- Department of Organic Chemistry</i>	5		2	A:2	140
16	C003976 Analytical Chemistry: Introduction <i>Peter Vandenabeele -- Department of Chemistry</i>	4		2	A:1	120
17	C003977 Spectroscopic Methods of Analysis <i>Laszlo Vincze -- Department of Chemistry</i>	4		2	A:2	120
18	C003978 Organic Reactivity 1 <i>Johan Winne -- Department of Organic Chemistry</i>	4		2	A:1	120
19	C003979 Organic Reactivity 2 <i>Johan Winne -- Department of Organic Chemistry</i>	6		2	A:2	180
20	C000337 Statistics <i>Lieven Clement -- Department of Mathematics, Computer Science and Statistics</i>	4		2	A:1	120
21	C003980 Electromagnetism <i>Pieter Geiregat -- Department of Chemistry</i>	5		2	A:1	140

22	C003981	Exploring, Evaluating and Exploiting Opportunities (Entrepreneurship) in Chemistry <i>Bart Clarysse -- Department of Marketing, Innovation and Organisation</i>	3	2	A:J	90
23	C003982	Experimentation in Chemistry 2 <i>Johan Winne -- Department of Organic Chemistry</i>	7	2	A:J	175
24	C003983	Electrochemistry and Chemical Kinetics <i>Katrien Strubbe -- Department of Chemistry</i>	4	3	A:1	115
25	C003984	Materials Chemistry <i>Klaartje De Buysser -- Department of Chemistry</i>	3	3	A:1	85
26	C003985	Electrochemical Analysis and Mass Spectrometry <i>Mieke Adriaens -- Department of Chemistry</i>	4	3	A:1	120
27	C003986	Analytical Separation Methods <i>Frederic Lynen -- Department of Organic Chemistry</i>	3	3	A:1	90
28	C003987	Organic Synthesis <i>Bruno Linclau -- Department of Organic Chemistry</i>	4	3	A:1	120
29	C003988	Polymer Chemistry <i>Filip Du Prez -- Department of Organic Chemistry</i>	4	3	A:1	105
30	C003989	Cellular Biochemistry <i>Annemieke Madder -- Department of Organic Chemistry</i>	3	3	A:1	90
31	C003990	Experimentation in Chemistry 3 <i>Klaartje De Buysser -- Department of Chemistry</i>	5	3	A:1	135

## 2 Minors

30 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 Research and Development

30 credits

Subscribe to no less than 24 and no more than 30 credit units from the following list, with 5 credit units with reference a.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003991 Quality Assurance, Healthcare and Environmental Management in the Chemical Industry <i>Kristof Van Hecke -- Department of Chemistry</i>	5	a	3	A:2	130
2	C004005 Bachelor Project [en] <i>Pascal Van Der Voort -- Department of Chemistry</i>	15		3	A:2	405
3	C003992 Internship Research & Development [nl, en] <i>Richard Hoogenboom -- Department of Organic Chemistry</i>	21		3	A:2, B:2	540
4	C000833 Project Management <i>Mario Vanhoucke -- Department of Business Informatics and Operations Management</i>	4		3	A:2	120
5	F000551 Business Skills [en] <i>Mieke Audenaert -- Department of Marketing, Innovation and Organisation</i>	4		3	C:2	120

#### 2.1.1 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.

### 2.2 Minor Multidisciplinary 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	C003993 Multidisciplinary Bachelor Project [en] <i>Annemieke Madder -- Department of Organic Chemistry</i>	15		3	A:2	405

#### 2.2.1 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.

#### 2.2.2 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.

### 2.3 Minor Education

30 credits

Subscribe to 30 credit units from the following list, with 9 credit units with reference a.

Nr	Course	CRDT	Ref	MT1	Session	Study
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1	H002476	Powerful Learning Environments <i>Bram De Wever -- Department of Educational Studies</i>	6		3	A:1	180
2	H002573	Teaching Methodology: Chemistry <i>Katrien Strubbe -- Department of Chemistry</i>	9	a	3	J:J	270
3	H002608	Teaching Methodology: STEM Focus STEM <i>Katrien Strubbe -- Department of Chemistry</i>	9	a	3	J:J	270
4	C004005	Bachelor Project [en] <i>Pascal Van Der Voort -- Department of Chemistry</i>	15		3	A:2	405

## 2.4 Minor Internationalisation

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] <i>Anna Kaczmarek -- Department of Chemistry</i>	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 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 2026-2027	f: annually, from 2027-2028	i: annually, from 2028-2029
b: tri-annually	d: bi-annually, from 2026-2027	g: bi-annually, from 2027-2028	j: bi-annually, from 2028-2029
	e: tri-annually, from 2026-2027	h: tri-annually, from 2027-2028	k: tri-annually, from 2028-2029