

Global Campus South Korea, Faculty of Sciences, Faculty of Bioscience Engineering

Bachelor of Science in Molecular Biotechnology

Campus: Incheon

Language of instruction: English

Programme version 10

1 General Courses 120 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	O000132 English for Academic Studies 1 <i>Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	A:1	150
2	O000133 General Biology <i>Hoo Sun Chung -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 54	5		1	A:1	150
3	O000078 Inorganic Chemistry 1: Structure of Matter <i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	A:1	150
4	O000185 Introduction to Engineering Mathematics <i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	A:1	150
5	O000187 Physics 1: Mechanics, Motion, Energy and Momentum <i>Soebiakto Loekman -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 47	5		1	A:1	150
6	O000131 English for Academic Studies 2 <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	B:1, A:2	150
7	O000087 Inorganic Chemistry 2: Reactivity of Matter <i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	5		1	A:2	150
8	O000155 Introduction to Biochemistry: Biomolecules <i>Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	A:2	150
9	O000186 Mathematics 1: One-variable calculus and algebra <i>Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		1	A:2	150
10	O000188 Physics 2: Vibration, Waves and Thermodynamics <i>Soebiakto Loekman -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 47	5		1	A:2	150
11	O000096 Informatics <i>Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 130	10		1	A:J	300
12	O000082 Organic Chemistry 1: Structure and Reactivity <i>Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		2	A:1	150
13	O000136 Chemical Analytical Methods <i>Jihae Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	4		2	A:1	120
14	O000137 Plant Biology <i>Dong Hye Seo -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	3		2	A:1	90

[Indicative price: € 0](#)

15	O000138	Animal Biology	3	2	A:1	75
Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
16	O000156	Biochemistry: Metabolism	4	2	A:1	120
Dongik Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: unknown						
17	O000083	Mathematics 2: Multivariable Calculus and Geometry	5	2	A:1	150
Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
18	O000091	Physics 3: Electricity and Magnetism	5	2	A:1	150
Serge Zhuiykov -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 119						
19	O000157	Microbiology	4	2	A:2	120
Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: unknown						
20	O000092	Organic Chemistry 2: Advanced Reactivity	5	2	A:2	150
Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
21	O000094	Physics 4: Optics and Physical and Chemical Thermodynamics	5	2	A:2	150
Serge Zhuiykov -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 206						
22	O000088	Mathematics 3: Differential Equations	5	2	A:2	150
Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
23	O000161	Environmental Chemistry and Technology: Concepts and Methods	4	2	A:2	120
Jihae Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: unknown						
24	O000159	Modern Aspects of Food	4	2	A:2	120
Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: unknown						
25	O000160	Molecular Biology: Concepts and Methods	4	2	A:2	120
Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: unknown						

2 General Courses

110 credits

The courses programmed in the 1st semester of the 4th bachelor's year are to be taken at the home campus of Ghent University.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	O000140	Process Engineering	5	3	A:1	150
Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
2	O000141	Process Modelling and Control	5	3	A:1	150
Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
3	O000050	Immunology	5	3	A:1	150
Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
4	O000178	Bioinformatics 1	5	3	A:1	150
Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 1,080						
5	O000179	Molecular Biology: Advanced Topics in Eukaryotes	6	3	A:1	150
Hoo Sun Chung -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 78						
6	O000189	Probability and Statistics	5	3	A:1	150
Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						
7	O000162	Scientific Research Writing	5	3	B:2, A:J	150
Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology						
Indicative price: € 0						

8	O000180	Bioinformatics 2 <i>Zhen Li -- Department of Plant Biotechnology and Bioinformatics</i> Indicative price: unknown	5	3	A:2	150
9	O000024	Economics and Marketing <i>Christine Yung Hung -- Department of Agricultural Economics</i> Indicative price: unknown	5	3	A:2	150
10	O000190	Introduction to Statistical Modelling <i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5	3	A:2	150
11	O000181	Molecular Genetics <i>Hélène Bastiaanse -- Department of Plant Biotechnology and Bioinformatics</i> Indicative price: € 85	3	3	A:2	90
12	O000182	Plant Physiology <i>Dong Hye Seo -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	3	3	A:2	90
13	O000183	Integrated Practicum 1: Plant Genetics and Physiology <i>Dong Hye Seo -- Department of Plant Biotechnology and Bioinformatics</i> Indicative price: € 0	3	3	A:2	75
14	C004085	Analytical Biochemistry <i>Els Van Damme -- Department of Biotechnology</i> Indicative price: € 8	5	4	A:1	150
15	C004086	Biomedical Physiology <i>Dirk de Graaf -- Department of Biochemistry, Physiology and Microbiology</i> Indicative price: € 0	5	4	A:1	150
16	I002852	Industrial Biotechnology <i>Inge Van Bogaert -- Department of Biotechnology</i> Indicative price: € 35	4	4	A:1	120
17	C004396	Gene Technology <i>Geert Berx -- Department of Molecular Biology</i> Indicative price: € 0	4	4	A:1	120
18	C004397	Integrated Practicum 2: Gene Technology in Practice <i>Xavier Saelens -- Department of Biochemistry, Physiology and Microbiology</i> Indicative price: € 0	3	4	A:1	75
19	C002865	Bioethics <i>Michiel De Proost -- Department of Philosophy and Moral Sciences</i> Indicative price: € 5	3	4	B:1	80
20	O000163	Management, Entrepreneurship and Intellectual Property <i>Benedikt Sas -- Department of Food Technology, Safety and Health</i> Indicative price: unknown	4	4	A:2	108
21	O000145	Plant Biotechnology <i>Laurens Pauwels -- Department of Biotechnology</i> Indicative price: € 0	4	4	A:2	108
22	O000184	Medical Biotechnology <i>Jens Staal -- Department of Biochemistry, Physiology and Microbiology</i> Indicative price: unknown	3	4	A:2	90
23	O000164	Company Visits and Seminars <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	3	4	A:2	90
24	O000165	Bachelor's Project <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 14	12	4	A:J	360

3 Elective Courses 10 credits

3.1 Programme-specific Elective Courses 5 credits

[Subscribe to 5 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C004096 Molecular Cell Biology <i>Roosmarijn Vandenbroucke -- Department of Molecular Biology</i> Indicative price: € 0	5		4	A:1	130

2	I002853	Research-to-Business Case Studies	5	4	A:1	125
<i>Erik Meers -- Department of Green Chemistry and Technology</i> Indicative price: unknown						

3.2 Elective courses

5 credits

Subscribe to 5 credit units from one of the modules from the following list.
Subject to approval by the Curriculum Committee.

3.2.1 Personal Professional Development

5 credits

[Subscribe to 5 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	Session	Study
1	O000166 Personal Professional Development <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 134	5		4	A:2	135
2	O000191 Intercultural Communication: Concepts and Skills <i>Mara Santi -- Department of Literary Studies</i> Indicative price: € 0	3		4	A:2	90
3	O000192 Intercultural Communication: Leadership and Professional Competencies <i>Mara Santi -- Department of Literary Studies</i> Indicative price: € 0	3		4	A:2	75

3.2.2 Course offer GUGC-UGent

5 credits

[Subscribe to no more than 5 credit units from the following list.](#)

The letter in the "Ref" column indicates in which programme the course can be taken as elective (E = Environmental Technology; F = Food Technology; M = Molecular Biotechnology; ALL = all programmes).

Nr	Course	CRDT	Ref	MT1	Session	Study
1	O000168 Experimental Food Biochemistry <i>Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5	E,M	4	A:2	150
2	O000152 Food Microbiology and Preservation <i>Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	5	E,M	4	A:2	150
3	O000180 Bioinformatics 2 <i>Zhen Li -- Department of Plant Biotechnology and Bioinformatics</i> Indicative price: unknown	5	E,F	4	A:2	150
4	O000050 Immunology <i>Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5	E,F	4	A:1	150
5	O000111 Plant Physiology <i>Dong Hye Seo -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5	E,F	4	A:2	125

3.2.3 Course offer Incheon Global Campus Universities

5 credits

[Subscribe to 5 credit units from courses offered at the partner universities at Incheon Global Campus.](#)

[Subject to approval by the Curriculum Committee.](#)

3.2.4 Course offer Korean Partner Universities

5 credits

[Subscribe to 5 credit units from courses offered at Korean partner universities.](#)

[Subject to approval by the Curriculum Committee.](#)

Programme related study costs

Type: Laptop

Name: Laptop

Indicative price: € 1,000

Optional: Yes

Fulltime standard learning track year: 1

Additional information: A laptop is required to support several courses within the programme, a.o. Informatics (BA1)

Type: Calculator

Name: Calculator

Indicative price: € 14

Optional: No

Fulltime standard learning track year: 1
Usability and Lifetime within the Study Programme : regularly
Additional information: Estimated cost: KRW 20,000 - EUR 14

Type: Lab Material

Name: Lab coat
Indicative price: € 15
Optional: No
Fulltime standard learning track year: 1
Additional information: A lab coat is required for the practical sessions for various courses (wet labs). It is paid by GUGC (first use). In case of loss or damage, to be bought by the student. Estimated cost: KRW 21,500 - EUR 15

Type: Other

Name: GUGC badge
Indicative price: € 10
Optional: No
Fulltime standard learning track year: 1
Additional information: A GUGC badge - used as student card, entrance badge and e-purse - is paid by GUGC (first use). In case of loss or damage, to be bought by the student. Estimated cost: KRW 15,000 - EUR 10

Type: Other

Name: Ghent semester - Belgian residence card
Indicative price: € 29
Optional: No
Fulltime standard learning track year: 4
Additional information: Cost for Belgian residence card, mandatory for stay in Belgium > 3 m.

Type: Other

Name: Ghent semester - All-in health and travel insurance
Indicative price: Free or paid by faculty
Optional: No
Fulltime standard learning track year: 4
Additional information: All-in insurance (3 m. required for visa application) is paid by GUGC for the entire period of stay in Ghent (cost: EUR 400)

Type: Other

Name: Ghent semester - Mandatory Belgian health insurance
Indicative price: € 75
Optional: No
Fulltime standard learning track year: 4
Additional information: Mandatory Belgian health insurance for all residents in Belgium (stay > 3 m)

Type: Other

Name: Ghent semester - Visa application cost
Indicative price: € 630
Optional: No
Fulltime standard learning track year: 4
Additional information: Visa fee: KRW 270,000 - EUR 183; Visa handling fee: KRW 350,382 - EUR 237; Cost Medical Certificate: may vary according to hospital (see info on Ufora); estimate: KRW 310,000 - EUR 210

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 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

Learning materials

The prices stated are indicative and subject to fluctuations.

The list of learning materials per course unit can be found in the course sheets.