

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

Bachelor of Science in Environmental Technology

Campus: Incheon

Language of instruction: English

Programme version 11

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

2 General Courses

106 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 <i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		3	A:1	150
2	O000141 Process Modelling and Control <i>Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		3	A:1	150
3	O000100 Process Technology <i>Frederik Ronsse -- Department of Green Chemistry and Technology</i> Indicative price: unknown	5		3	A:1	150
4	O000170 Green Chemistry and Biotechnology <i>Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		3	A:1	150
5	O000171 Air Treatment and Technology <i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	5		3	A:1	150
6	O000189 Probability and Statistics <i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		3	A:1	150
7	O000162 Scientific Research Writing <i>Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	5		3	B:2, A:J	150

8	O000024	Economics and Marketing <i>Christine Yung Hung -- Department of Agricultural Economics</i> Indicative price: unknown	5	3	A:2	150
9	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
10	O000172	Waste Valorization <i>Erik Meers -- Department of Green Chemistry and Technology</i> Indicative price: unknown	5	3	A:2	150
11	O000173	Remediation of Soil and Sediment <i>Filip Tack -- Department of Green Chemistry and Technology</i> Indicative price: € 20	5	3	A:2	150
12	O000174	Water Treatment and Technology <i>Korneel Rabaey -- Department of Biotechnology</i> Indicative price: unknown	5	3	A:2	150
13	I002853	Research-to-Business Case Studies <i>Erik Meers -- Department of Green Chemistry and Technology</i> Indicative price: unknown	5	4	A:1	125
14	I002606	Environmental Risk Assessment <i>Karel De Schampelaere -- Department of Animal Sciences and Aquatic Ecology</i> Indicative price: € 0	5	4	A:1	150
15	I002535	Applied Marine Ecology <i>Colin Janssen -- Department of Animal Sciences and Aquatic Ecology</i> Indicative price: € 0	3	4	A:1	90
16	I002701	Clean Technology: Theory and Concepts <i>Sophie Huysveld -- Department of Green Chemistry and Technology</i> Indicative price: unknown	3	4	A:1	90
17	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
18	O000175	Environmental Law and Management <i>Stijn Speelman -- Department of Agricultural Economics</i> Indicative price: unknown	5	4	A:2	150
19	O000176	Modelling and Data Analysis for Environmental Applications <i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: unknown	3	4	A:2	90
20	O000177	Microbial Reuse Technology <i>Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i> Indicative price: € 0	3	4	A:2	90
21	O000164	Company Visits and Seminars Indicative price: € 0	3	4	A:2	90
22	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

14 credits

3.1 Programme-specific Elective Courses

9 credits

[Subscribe to 9 credit units from the following list.](#)

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002504 Applied Freshwater Ecology <i>Peter Goethals -- Department of Animal Sciences and Aquatic Ecology</i> Indicative price: unknown	3		4	A:1	90
2	I002609 Environmental Microbiology <i>Nico Boon -- Department of Biotechnology</i> Indicative price: € 0	3		4	A:1	90
3	I002702 Clean Technology: Assessment Methods <i>Sophie Huysveld -- Department of Green Chemistry and Technology</i> Indicative price: unknown	3		4	A:1	90

4	I002752	Advanced Wastewater Treatment Process Design <i>Eveline Volcke -- Department of Green Chemistry and Technology</i> Indicative price: € 0	3	4	A:1	90
5	I002776	Processes in Practice <i>Eveline Volcke -- Department of Green Chemistry and Technology</i> Indicative price: € 2	3	4	A:1	90
6	I001439	Environmental Noise <i>Timothy Van Renterghem -- Department of Information Technology</i> Indicative price: unknown	3	4	A:1	75
7	I002604	Oceans and Human Health <i>Jana Asselman -- Department of Animal Sciences and Aquatic Ecology</i> Indicative price: € 0	3	4	A:1	90

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: No

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: Free or paid by faculty

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: Free or paid by faculty

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 - 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

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 - 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.

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.