GHENT UNIVERSITY

Study Programme

Academic year 2022-2023

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 9

1 General Courses — 120 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	O000132	English for Academic Studies 1 *Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:1	150
2	O000133	General Biology *Hoo Sun Chung -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:1	150
3	O000078	Inorganic Chemistry 1: Structure of Matter *Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:1	150
4	O000185	Introduction to Engineering Mathematics *Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:1	150
5	O000187	Physics 1: Mechanics, Motion, Energy and Momentum *Soebiakto Loekman -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:1	150
6	O000131	English for Academic Studies 2 *Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	B:1, A:2	150
7	O000087	Inorganic Chemistry 2: Reactivity of Matter *Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:2	150
8	O000155	Introduction to Biochemistry: Biomolecules *Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:2	150
9	O000186	Mathematics 1: One-variable calculus and algebra *Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:2	150
10	O000188	Physics 2: Vibration, Waves and Thermodynamics *Soebiakto Loekman -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		1	A:2	150
11	O000096	Informatics *Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	10		1	A:J	300
12	O000082	Organic Chemistry 1: Structure and Reactivity *Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:1	150
13	O000136	Chemical Analytical Methods *Jihae Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:1	120
14	O000137	Plant Biology *Stephen Depuydt -- Department of Plant Biotechnology and Bioinformatics*	3		2	A:1	90
15	O000138	Animal Biology *Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	3		2	A:1	75
16	O000156	Biochemistry: Metabolism *Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:1	120
17	O000083	Mathematics 2: Multivariable Calculus and Geometry *Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:1	150
18	O000091	Physics 3: Electricity and Magnetism *Serge Zhuiykov -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:1	150
19	O000157	Microbiology *Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:2	120
20	O000092	Organic Chemistry 2: Advanced Reactivity *Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:2	150

21	O000094	Physics 4: Optics and Physical and Chemical Thermodynamics *Serge Zhuiykov -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:2	150
22	O000088	Mathematics 3: Differential Equations *Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		2	A:2	150
23	O000161	Environmental Chemistry and Technology: Concepts and Methods *Jihae Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:2	120
24	O000159	Modern Aspects of Food *Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:2	120
25	O000160	Molecular Biology: Concepts and Methods *Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	4		2	A:2	120

2 General Courses 106 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	O000140	Process Engineering *Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:1	150
2	O000141	Process Modelling and Control *Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:1	150
3	O000100	Process Technology *Frederik Ronsse -- Department of Green Chemistry and Technology*	5		3	A:1	150
4	O000170	Green Chemistry and Biotechnology *Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:1	150
5	O000171	Air Treatment and Technology *Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:1	150
6	O000189	Probability and Statistics *Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:1	150
7	O000162	Scientific Research Writing *Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	B:2, A:J	150
8	O000024	Economics and Marketing *Christine Yung Hung -- Department of Agricultural Economics*	5		3	A:2	150
9	O000190	Introduction to Statistical Modelling *Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		3	A:2	150
10	O000172	Waste Valorization *Erik Meers -- Department of Green Chemistry and Technology*	5		3	A:2	150
11	O000173	Remediation of Soil and Sediment *Filip Tack -- Department of Green Chemistry and Technology*	5		3	A:2	150
12	O000174	Water Treatment and Technology *Xiaofei Wang -- Department of Biotechnology*	5		3	A:2	150
13	I002853	Research-to-Business Case Studies *Erik Meers -- Department of Green Chemistry and Technology*	5		4	A:1	125
14	I002606	Environmental Risk Assessment *Karel De Schamphelaere -- Department of Animal Sciences and Aquatic Ecology*	5		4	A:1	150
15	I002535	Applied Marine Ecology *Colin Janssen -- Department of Animal Sciences and Aquatic Ecology*	3		4	A:1	90
16	I002701	Clean Technology: Theory and Concepts *Sophie Huysveld -- Department of Green Chemistry and Technology*	3		4	A:1	90
17	O000163	Management, Entrepreneurship and Intellectual Property *Benedikt Sas -- Department of Food Technology, Safety and Health*	4		4	A:2	108
18	O000175	Environmental Law and Management *Stijn Speelman -- Department of Agricultural Economics*	5		4	A:2	150
19	O000176	Modelling and Data Analysis for Environmental Applications *Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	3		4	A:2	90
20	O000177	Microbial Reuse Technology *Alberte Regueira López -- Department of Biotechnology*	3		4	A:2	90
21	O000164	Company Visits and Seminars	3		4	A:2	90
22	O000165	Bachelor's Project *Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	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 *Peter Goethals -- Department of Animal Sciences and Aquatic Ecology*	3		4	A:1	90
2	I002609	Environmental Microbiology *Nico Boon -- Department of Biotechnology*	3		4	A:1	90
3	I002702	Clean Technology: Assessment Methods *Sophie Huysveld -- Department of Green Chemistry and Technology*	3		4	A:1	90
4	I002752	Advanced Wastewater Treatment Process Design *Eveline Volcke -- Department of Green Chemistry and Technology*	3		4	A:1	90
5	I002776	Processes in Practice *Eveline Volcke -- Department of Green Chemistry and Technology*	3		4	A:1	90
6	I001439	Environmental Noise *Timothy Van Renterghem -- Department of Information Technology*	3		4	A:1	75
7	I002604	Oceans and Human Health *Jana Asselman -- Department of Animal Sciences and Aquatic Ecology*	3		4	A:1	90
8	I002170	Environmental Inventory Techniques *Kim Calders -- Department of Environment*	3		4	A:1	75

3.2 Personal Professional Development elective module — 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

Nr	Course		CRDT	Ref	MT1	Session	Study
1	O000166	Personal Professional Development *Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5		4	A:2	135

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 *Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5	E,M	4	A:2	150
2	O000152	Food Microbiology and Preservation *Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5	E,M	4	A:2	150
3	O000180	Bioinformatics 2 *Zhen Li -- Department of Plant Biotechnology and Bioinformatics*	5	E,F	4	A:2	150
4	O000167	Reflection on Sustainable Development	5	ALL	4	A:2	125
5	O000050	Immunology *Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology*	5	E,F	4	A:1	150
6	O000111	Plant Physiology *Jonas De Saeger -- Department of Plant Biotechnology and Bioinformatics*	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.

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 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