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

Nr	Course		CRDT	Ref	MT1	Session	Study
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					
22	O000088	Mathematics 3: Differential Equations	5		2	A:2	150
		Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
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					
24	O000159	Modern Aspects of Food	4		2	A:2	120
		Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
25	O000160	Molecular Biology: Concepts and Methods	4		2	A:2	120
		Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					

2 General Courses — 106 credits

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					
2	O000141	Process Modelling and Control	5		3	A:1	150
		Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
3	O000100	Process Technology	5		3	A:1	150
		Frederik Ronsse -- Department of Green Chemistry and Technology					
4	O000170	Green Chemistry and Biotechnology	5		3	A:1	150
		Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
5	O000171	Air Treatment and Technology	5		3	A:1	150
		Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
6	O000189	Probability and Statistics	5		3	A:1	150
		Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
7	O000162	Scientific Research Writing	5		3	B:2, A:J	150
		Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
8	O000024	Economics and Marketing	5		3	A:2	150
		Christine Yung Hung -- Department of Agricultural Economics					
9	O000190	Introduction to Statistical Modelling	5		3	A:2	150
		Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
10	O000172	Waste Valorization	5		3	A:2	150
		Erik Meers -- Department of Green Chemistry and Technology					
11	O000173	Remediation of Soil and Sediment	5		3	A:2	150
		Filip Tack -- Department of Green Chemistry and Technology					
12	O000174	Water Treatment and Technology	5		3	A:2	150
		Xiaofei Wang -- Department of Biotechnology					
13	I002853	Research-to-Business Case Studies	5		4	A:1	125
		Erik Meers -- Department of Green Chemistry and Technology					
14	I002606	Environmental Risk Assessment	5		4	A:1	150
		Karel De Schamphelaere -- Department of Animal Sciences and Aquatic Ecology					
15	I002535	Applied Marine Ecology	3		4	A:1	90
		Colin Janssen -- Department of Animal Sciences and Aquatic Ecology					
16	I002701	Clean Technology: Theory and Concepts	3		4	A:1	90
		Sophie Huysveld -- Department of Green Chemistry and Technology					
17	O000163	Management, Entrepreneurship and Intellectual Property	4		4	A:2	108
		Benedikt Sas -- Department of Food Technology, Safety and Health					
18	O000175	Environmental Law and Management	5		4	A:2	150
		Stijn Speelman -- Department of Agricultural Economics					
19	O000176	Modelling and Data Analysis for Environmental Applications	3		4	A:2	90
		Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
20	O000177	Microbial Reuse Technology	3		4	A:2	90
		Alberte Regueira López -- Department of Biotechnology					
21	O000164	Company Visits and Seminars	3		4	A:2	90
		Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
22	O000165	Bachelor's Project	12		4	A:J	360
		Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					

3 Elective Courses   14 credits

3.1 Programme-specific Elective Courses   9 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I002504	Applied Freshwater Ecology	3		4	A:1	90
		Peter Goethals -- Department of Animal Sciences and Aquatic Ecology					
2	I002609	Environmental Microbiology	3		4	A:1	90
		Nico Boon -- Department of Biotechnology					
3	I002702	Clean Technology: Assessment Methods	3		4	A:1	90
		Sophie Huysveld -- Department of Green Chemistry and Technology					
4	I002752	Advanced Wastewater Treatment Process Design	3		4	A:1	90
		Eveline Volcke -- Department of Green Chemistry and Technology					
5	I002776	Processes in Practice	3		4	A:1	90
		Eveline Volcke -- Department of Green Chemistry and Technology					
6	I001439	Environmental Noise	3		4	A:1	75
		Timothy Van Renterghem -- Department of Information Technology					
7	I002604	Oceans and Human Health	3		4	A:1	90
		Jana Asselman -- Department of Animal Sciences and Aquatic Ecology					
8	I002170	Environmental Inventory Techniques	3		4	A:1	75
		Kim Calders -- Department of Environment					

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	5		4	A:2	135
		Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					

3.2.2 Course offer GUGC-UGent   5 credits

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

3.2.3 Course offer Incheon Global Campus Universities   5 credits

Subject to approval by the Curriculum Committee.

3.2.4 Course offer Korean Partner Universities   5 credits

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