Study Programme

Academic year 2021-2022

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 8

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
		Yoon-Seok Chang -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
4	O000131	English for Academic Studies 2	5		1	B:1, A:2	150
		Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
5	O000087	Inorganic Chemistry 2: Reactivity of Matter	5		1	A:2	150
		Antonio Rizzo -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
6	O000155	Introduction to Biochemistry: Biomolecules	5		1	A:2	150
		Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
7	O000095	Mathematics 1: Engineering Mathematics	10		1	A:J	300
		Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
8	O000134	Physics 1 and 2: Mechanics, Vibration, Waves and Thermodynamics	10		1	A:J	300
		Soebiakto Loekman -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
9	O000096	Informatics	10		1	A:J	300
		Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
10	O000082	Organic Chemistry 1: Structure and Reactivity	5		2	A:1	150
		Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
11	O000136	Chemical Analytical Methods	4		2	A:1	120
		Tanja Cirkovic Velickovic -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
12	O000137	Plant Biology	3		2	A:1	90
		Stephen Depuydt -- Department of Plant Biotechnology and Bioinformatics					
13	O000138	Animal Biology	3		2	A:1	75
		Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
14	O000156	Biochemistry: Metabolism	4		2	A:1	120
		Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
15	O000083	Mathematics 2: Multivariable Calculus and Geometry	5		2	A:1	150
		Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
16	O000091	Physics 3: Electricity and Magnetism	5		2	A:1	150
		Serge Zhuiykov -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
17	O000157	Microbiology	4		2	A:2	120
		Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
18	O000092	Organic Chemistry 2: Advanced Reactivity	5		2	A:2	150
		Di Wu -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
19	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					
20	O000088	Mathematics 3: Differential Equations	5		2	A:2	150
		Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
21	O000161	Environmental Chemistry and Technology: Concepts and Methods	4		2	A:2	120
		Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					

Nr	Course		CRDT	Ref	MT1	Session	Study
22	O000159	Modern Aspects of Food	4	2		A:2	120
		Sam Van Haute -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
23	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
		Francis Verpoort -- 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	O000139	Probability and Statistics	10	3		A:J	250
		Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
7	O000162	Scientific Research Writing	5	3		B:2, A:J	150
		Michael Dunne -- 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	O000172	Waste Valorization	5	3		A:2	150
		Erik Meers -- Department of Green Chemistry and Technology					
10	O000173	Remediation of Soil and Sediment	5	3		A:2	150
		Filip Tack -- Department of Green Chemistry and Technology					
11	O000174	Water Treatment and Technology	5	3		A:2	150
		Korneel Rabaey -- Department of Biotechnology					
12	I002853	Research-to-Business Case Studies	5	4		A:1	125
		Erik Meers -- Department of Green Chemistry and Technology					
13	I002606	Environmental Risk Assessment	5	4		A:1	150
		Karel De Schamphelaere -- Department of Animal Sciences and Aquatic Ecology					
14	I002535	Applied Marine Ecology	3	4		A:1	90
		Colin Janssen -- Department of Animal Sciences and Aquatic Ecology					
15	I002701	Clean Technology: Theory and Concepts	3	4		A:1	90
		Pieter Nachtergaele -- Department of Green Chemistry and Technology					
16	O000163	Management, Entrepreneurship and Intellectual Property	4	4		A:2	108
		Benedikt Sas -- Department of Food Technology, Safety and Health					
17	O000175	Environmental Law and Management	5	4		A:2	150
		Stijn Speelman -- Department of Agricultural Economics					
18	O000176	Modelling and Data Analysis for Environmental Applications	3	4		A:2	90
		Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
19	O000177	Microbial Reuse Technology	3	4		A:2	90
		Justine Sauvage -- Department of Biotechnology					
20	O000164	Company Visits and Seminars	3	4		(A:2)[c]	90
		Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
21	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

Subscribe to 9 credit units from the following list.

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					

Nr	Course		CRDT		MT1	Session	Study
2	I002609	Environmental Microbiology	3		4	A:1	90
		Karel Folens -- Department of Biotechnology					
3	I002702	Clean Technology: Assessment Methods	3		4	A:1	90
		Pieter Nachtergaele -- 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
		Ellen Van De Vijver -- 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

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	5	E,M	4	A:2	150
		Tanja Cirkovic Velickovic -- Department of Food Technology, Safety and Health					
2	O000152	Food Microbiology and Preservation	5	E,M	4	A:2	150
		Mieke Uyttendaele -- Department of Food Technology, Safety and Health					
3	O000167	Reflection on Sustainable Development	5	ALL	4	A:2	125
		Stephen Depuydt -- Department of Plant Biotechnology and Bioinformatics					
4	O000050	Immunology	5	E,F	4	A:1	150
		Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology					
5	O000111	Plant Physiology	5	E,F	4	A:2	125
		Stephen Depuydt -- Department of Plant Biotechnology and Bioinformatics					

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 2022-2023	f: annually, from 2023-2024	i: annually, from 2024-2025
b: tri-annually	d: bi-annually, from 2022-2023	g: bi-annually, from 2023-2024	j: bi-annually, from 2024-2025
	e: tri-annually, from 2022-2023	h: tri-annually, from 2023-2024	k: tri-annually, from 2024-2025