



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 8

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>	5	1	A:1	150	
2	O000133 General Biology <i>Hoo Sun Chung -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	5	1	A:1	150	
4	O000185 Introduction to Engineering Mathematics <i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	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>	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>	5	1	A:2	150	
8	O000155 Introduction to Biochemistry: Biomolecules <i>Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	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>	5	1	A:2	150	
11	O000096 Informatics <i>Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	5	2	A:1	150	
13	O000136 Chemical Analytical Methods <i>Jihae Park -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	4	2	A:1	120	
14	O000137 Plant Biology <i>Stephen Depuydt -- Department of Plant Biotechnology and Bioinformatics</i>	3	2	A:1	90	
15	O000138 Animal Biology <i>Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	3	2	A:1	75	
16	O000156 Biochemistry: Metabolism <i>Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	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>	5	2	A:1	150	
19	O000157 Microbiology <i>Magdalena Radwanska -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	5	2	A:2	150	

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

2 General Courses

110 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	O000140	Process Engineering	5	3	A:1	150	
		<i>Philippe Heynderickx -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
2	O000141	Process Modelling and Control	5	3	A:1	150	
		<i>Shodhan Rao -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
3	O000050	Immunology	5	3	A:1	150	
		<i>Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
4	O000178	Bioinformatics 1	5	3	A:1	150	
		<i>Wesley De Neve -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
5	O000179	Molecular Biology: Advanced Topics in Eukaryotes	6	3	A:1	150	
		<i>Hoo Sun Chung -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
6	O000189	Probability and Statistics	5	3	A:1	150	
		<i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
7	O000162	Scientific Research Writing	5	3	B:2, A:J	150	
		<i>Jonathan Ozelton -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
8	O000180	Bioinformatics 2	5	3	A:2	150	
		<i>Zhen Li -- Department of Plant Biotechnology and Bioinformatics</i>					
9	O000024	Economics and Marketing	5	3	A:2	150	
		<i>Christine Yung Hung -- Department of Agricultural Economics</i>					
10	O000190	Introduction to Statistical Modelling	5	3	A:2	150	
		<i>Joris Vankerschaver -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
11	O000181	Molecular Genetics	3	3	A:2	90	
		<i>Héloïse Bastiaanse -- Department of Plant Biotechnology and Bioinformatics</i>					
12	O000182	Plant Physiology	3	3	A:2	90	
		<i>Jonas De Saeger -- Department of Plant Biotechnology and Bioinformatics</i>					
13	O000183	Integrated Practicum 1: Plant Genetics and Physiology	3	3	A:2	75	
		<i>Eun Kyung Yoon -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>					
14	C004085	Analytical Biochemistry	5	4	A:1	150	
		<i>Els Van Damme -- Department of Biotechnology</i>					
15	C004086	Biomedical Physiology	5	4	A:1	150	
		<i>Dirk de Graaf -- Department of Biochemistry, Physiology and Microbiology</i>					
16	I002852	Industrial Biotechnology	4	4	A:1	120	
		<i>Inge Van Bogaert -- Department of Biotechnology</i>					
17	C004396	Gene Technology	4	4	A:1	120	
		<i>Geert Berx -- Department of Molecular Biology</i>					
18	C004397	Integrated Practicum 2: Gene Technology in Practice	3	4	A:1	75	
		<i>Xavier Saelens -- Department of Biochemistry, Physiology and Microbiology</i>					
19	C002865	Bioethics	3	4	B:1	80	
		<i>Farah Focquaert -- Department of Philosophy and Moral Sciences</i>					
20	O000163	Management, Entrepreneurship and Intellectual Property	4	4	A:2	108	
		<i>Benedikt Sas -- Department of Food Technology, Safety and Health</i>					
21	O000145	Plant Biotechnology	4	4	A:2	108	
		<i>Godelieve Gheysen -- Department of Biotechnology</i>					
22	O000184	Medical Biotechnology	3	4	A:2	90	
		<i>Jens Staal -- Department of Biochemistry, Physiology and Microbiology</i>					

23	O000164	Company Visits and Seminars <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	3	4	A:2	90
24	O000165	Bachelor's Project <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	5		4	A:1	130
2	I002853 Research-to-Business Case Studies <i>Erik Meers -- Department of Green Chemistry and Technology</i>	5		4	A:1	125

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 <i>Michael Dunne -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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 <i>Mahta Mirzaei -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	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>	5	E,M	4	A:2	150
3	O000180 Bioinformatics 2 <i>Zhen Li -- Department of Plant Biotechnology and Bioinformatics</i>	5	E,F	4	A:2	150
4	O000167 Reflection on Sustainable Development	5	ALL	4	A:2	125
5	O000050 Immunology <i>Stefan Magez -- Department of Environmental Technology, Food Technology and Molecular Biotechnology</i>	5	E,F	4	A:1	150
6	O000111 Plant Physiology <i>Jonas De Saeger -- Department of Plant Biotechnology and Bioinformatics</i>	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 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 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