

# Study Programme

Academic year 2021-2022

## 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 7

1	General	Courses			120 (	credits
Nr	Course		CRDT Re	f MT1	Session	Study
1	O000132	English for Academic Studies 1  Jonathan Ozelton Department of Environmental Technology, Food Technology and Molecular Bio	5 otechnology	1	A:1	150
2	O000133	General Biology Hoo Sun Chung Department of Environmental Technology, Food Technology and Molecular Biotec	5 chnology	1	A:1	150
3	O000078	Inorganic Chemistry 1: Structure of Matter Yoon-Seok Chang Department of Environmental Technology, Food Technology and Molecular Bio	5 technology	1	A:1	150
4	O000131	English for Academic Studies 2  Michael Dunne Department of Environmental Technology, Food Technology and Molecular Biotec	5 chnology	1	B:1, A:2	150
5	O000087	Inorganic Chemistry 2: Reactivity of Matter Antonio Rizzo Department of Environmental Technology, Food Technology and Molecular Biotech	5 hnology	1	A:2	150
6	O000155	Introduction to Biochemistry: Biomolecules Sam Van Haute Department of Environmental Technology, Food Technology and Molecular Biote	5 chnology	1	A:2	150
7	O000095	Mathematics 1: Engineering Mathematics  Shodhan Rao Department of Environmental Technology, Food Technology and Molecular Biotech	10	1	A:J	300
8	O000134	Physics 1 and 2: Mechanics, Vibration, Waves and Thermodynamics Soebiakto Loekman Department of Environmental Technology, Food Technology and Molecular B	10	1	A:J	300
9	O000096	Informatics Wesley De Neve Department of Environmental Technology, Food Technology and Molecular Biote	10 echnology	1	A:J	300
10	O000082	Organic Chemistry 1: Structure and Reactivity  Di Wu Department of Environmental Technology, Food Technology and Molecular Biotechnology	5	2	A:1	150
11	O000136	Chemical Analytical Methods Tanja Cirkovic Velickovic Department of Environmental Technology, Food Technology and Molecu	4 Ilar Biotechnology	2	A:1	120
12	O000137	Plant Biology Stephen Depuydt Department of Plant Biotechnology and Bioinformatics	3	2	A:1	90
13	O000138	Animal Biology  Magdalena Radwanska Department of Environmental Technology, Food Technology and Molecul	3 ar Biotechnology	2	A:1	75
14	O000156	Biochemistry: Metabolism Stefan Magez Department of Environmental Technology, Food Technology and Molecular Biotech	4 inology	2	A:1	120
15	O000083	Mathematics 2: Multivariable Calculus and Geometry  Shodhan Rao Department of Environmental Technology, Food Technology and Molecular Biotech	5 nology	2	A:1	150
16	O000091	Physics 3: Electricity and Magnetism Serge Zhuiykov Department of Environmental Technology, Food Technology and Molecular Biote	5	2	A:1	150
17	O000157	Microbiology  Magdalena Radwanska Department of Environmental Technology, Food Technology and Molecul	4	2	A:2	120
18	O000092	Organic Chemistry 2: Advanced Reactivity  Di Wu Department of Environmental Technology, Food Technology and Molecular Biotechnology	5	2	A:2	150
19	O000094	Physics 4: Optics and Physical and Chemical Thermodynamics Serge Zhuiykov Department of Environmental Technology, Food Technology and Molecular Biote	5	2	A:2	150
20	O000088	Mathematics 3: Differential Equations  Shodhan Rao Department of Environmental Technology, Food Technology and Molecular Biotech	5	2	A:2	150

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21	O000161	Environmental Chemistry and Technology: Concepts and Methods Philippe Heynderickx Department of Environmental Technology, Food Technology and Molecular E	<b>4</b> Biotechnology	2	A:2	120
22	O000159	Modern Aspects of Food Sam Van Haute Department of Environmental Technology, Food Technology and Molecular Biotech	4 hnology	2	A:2	120
23	O000160	Molecular Biology: Concepts and Methods  Magdalena Radwanska Department of Environmental Technology, Food Technology and Molecular	<b>4</b> r Biotechnology	2	A:2	120
2	General	Courses			110	credits
Nr	Course		CRDT Ref	MT1	Session	Study
1	O000140	Process Engineering Philippe Heynderickx Department of Environmental Technology, Food Technology and Molecular E	5 Biotechnology	3	A:1	150
2	O000141	Process Modelling and Control Shodhan Rao Department of Environmental Technology, Food Technology and Molecular Biotechn	5 ology	3	A:1	150
3	O000050	Immunology Stefan Magez Department of Environmental Technology, Food Technology and Molecular Biotechn	5 nology	3	A:1	150
4	O000178	Bioinformatics 1 Wesley De Neve Department of Environmental Technology, Food Technology and Molecular Biotec	5 hnology	3	A:1	150
5	O000179	Molecular Biology: Advanced Topics in Eukaryotes  Hoo Sun Chung Department of Environmental Technology, Food Technology and Molecular Biotech	6 inology	3	A:1	150
6	O000139	Probability and Statistics  Joris Vankerschaver Department of Environmental Technology, Food Technology and Molecular Bit	10 otechnology	3	A:J	250
7	O000162	Scientific Research Writing  Michael Dunne Department of Environmental Technology, Food Technology and Molecular Biotech	5 nnology	3	B:2, A:J	150
8	O000180	Bioinformatics 2  Zhen Li Department of Plant Biotechnology and Bioinformatics	5	3	A:2	150
9	O000024	Economics and Marketing Christine Yung Hung Department of Agricultural Economics	5	3	A:2	150
10	O000181	Molecular Genetics Geert De Jaeger Department of Plant Biotechnology and Bioinformatics	3	3	A:2	90
11	O000182	Plant Physiology Stephen Depuydt Department of Plant Biotechnology and Bioinformatics	3	3	A:2	90
12	O000183	Integrated Practicum 1: Plant Genetics and Physiology  Eun Kyung Yoon Department of Environmental Technology, Food Technology and Molecular Biotec	3 Chnology	3	A:2	75
13	C004085	Analytical Biochemistry Els Van Damme Department of Biotechnology	5	4	A:1	150
14	C004086	Biomedical Physiology Peter Brouckaert Department of Molecular Biology	5	4	A:1	150
15	1002852	Industrial Biotechnology Inge Van Bogaert Department of Biotechnology	4	4	A:1	120
16	C004396	Gene Technology Geert Berx Department of Molecular Biology	4	4	A:1	120
17	C004397	Integrated Practicum 2: Gene Technology in Practice  Xavier Saelens Department of Biochemistry, Physiology and Microbiology	3	4	A:1	75
18	C002865	Bioethics Farah Focquaert Department of Philosophy and Moral Sciences	3	4	B:1	80
19	O000163	Management, Entrepreneurship and Intellectual Property Benedikt Sas Department of Food Technology, Safety and Health	4	4	A:2	108
20	O000145	Plant Biotechnology  Godelieve Gheysen Department of Biotechnology	4	4	A:2	108
21	O000184	Medical Biotechnology  Jens Staal Department of Biochemistry, Physiology and Microbiology	3	4	A:2	90
22	O000164	Company Visits and Seminars  Michael Dunne Department of Environmental Technology, Food Technology and Molecular Biotech	3 nnology	4	(A:2) <sup>c</sup>	90
23	O000165	Bachelor's Project Michael Dunne Department of Environmental Technology, Food Technology and Molecular Biotech	12 nnology	4	A:J	360
3	Elective	Courses			10 (	credits

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Subscribe to 5 credit units from the following list.

N	Course		CRDT R	ef MT1	Session	Study
1	C004096	Molecular Cell Biology Roosmarijn Vandenbroucke Department of Molecular Biology	5	4	A:1	130
2	1002853	Research-to-Business Case Studies  Erik Meers Department of Green Chemistry and Technology	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	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 Tanja Cirkovic Velickovic Department of Food Technology, Safety and Health	5	E,M	4	A:2	150
2	O000152	Food Microbiology and Preservation  Mieke Uyttendaele Department of Food Technology, Safety and Health	5	E,M	4	A:2	150
3	O000167	Reflection on Sustainable Development Stephen Depuydt Department of Plant Biotechnology and Bioinformatics	5	ALL	4	A:2	125
4	O000050	Immunology Stefan Magez Department of Environmental Technology, Food Technology and Molecular Biotech	5 nnology	E,F	4	A:1	150
5	O000111	Plant Physiology Stephen Depuydt 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 2022-2023 f: annually, from 2023-2024 i: annually, from 2024-2025 b: tri-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

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