GHENT UNIVERSITY

Study Programme

Academic year 2026-2027

Faculty of Bioscience Engineering

Bachelor of Science in Bioscience Engineering Technology

Language of instruction: Dutch

Programme version 12

1 General Courses — 126 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I700266	Calculus I *Jan Baetens -- Department of Data Analysis and Mathematical Modelling*	6		1	A:1	180
2	I700306	Programming *Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling*	4		1	A:1	120
3	I700286	Mechanics *Dirk Poelman -- Department of Solid State Sciences*	5		1	A:1	150
4	I700287	General Chemistry I *Pieter Vermeir -- Department of Green Chemistry and Technology*	5		1	A:1	150
5	I700200	Zoology: Morphology and Systematics *Thomas Van Hecke -- Department of Animal Sciences and Aquatic Ecology*	4		1	A:1	120
6	I700201	Botany: Morphology and Diversity *Pieter De Frenne -- Department of Environment*	4		1	A:1	120
7	I700267	Linear Algebra and Calculus II *Jan Baetens -- Department of Data Analysis and Mathematical Modelling*	5		1	A:2	150
8	I700204	Thermodynamics *Frederik Ronsse -- Department of Green Chemistry and Technology*	4		1	A:2	120
9	I700205	General Chemistry II *Pieter Vermeir -- Department of Green Chemistry and Technology*	4		1	A:2	120
10	I700206	Organic Chemistry *Sven Mangelinckx -- Department of Green Chemistry and Technology*	5		1	A:2	150
11	I700207	Biochemistry *Jessika De Clippeleer -- Department of Biotechnology*	5		1	A:2	150
12	I700190	Cell Biology *Kris Audenaert -- Department of Plants and Crops*	4		1	A:2	120
13	I700288	Engineering Project *Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling*	5		1	A:J	150
14	I700307	Modelling and Simulation with Differential Equations *Michiel Stock -- Department of Data Analysis and Mathematical Modelling*	4		2	A:1	120
15	I700269	Applied Fluid Mechanics *Niko Verhoest -- Department of Environment*	5		2	A:1	150
16	I700209	Electricity and Magnetism *Toon Verstraelen -- Department of Physics and Astronomy*	4		2	A:1	120
17	I700216	Analytical Chemistry *Pieter Vermeir -- Department of Green Chemistry and Technology*	6		2	A:1	180
18	I700272	Probability Theory and Statistics *Stijn Luca -- Department of Data Analysis and Mathematical Modelling*	6		2	A:2	180
19	I700268	Optics and Sensors *Philippe Smet -- Department of Solid State Sciences*	3		2	A:2	90
20	I700211	Genetics *Kris Audenaert -- Department of Plants and Crops*	5		2	A:2	150

21	I700217	Microbiology *Leen De Gelder -- Department of Biotechnology*	5		2	A:2	150
22	I700218	Ecology *Kim Calders -- Department of Environment*	3		2	A:2	90
23	I700219	Process Technology I *Mia Eeckhout -- Department of Food Technology, Safety and Health*	5		3	A:1	150
24	I700224	Quality Management Systems in the Food Chain *Liesbeth Jacxsens -- Department of Food Technology, Safety and Health*	3		3	A:1	90
25	I700220	Environmental Sciences *Leen De Gelder -- Department of Biotechnology*	4		3	A:1	120
26	I700221	Entrepreneurship and Business Administration *Joachim Schouteten -- Department of Agricultural Economics*	6		3	A:1	180
27	I700273	Bachelor Project *Mia Eeckhout -- Department of Food Technology, Safety and Health*	7		3	A:J	210

2 Elective Courses

Subscribe to 1 module from the following list.

2.1 Biotechnology

54 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I700228	Analysis and Separation of Biomolecules *Yves Briers -- Department of Biotechnology*	6		2	A:1	180
2	I700229	Supplementary Biochemistry *Kathy Messens -- Department of Biotechnology*	5		2	A:2	150
3	I700231	Balances of Biochemical and Chemical Processes *Leen De Gelder -- Department of Biotechnology*	4		2	A:2	120
4	I700230	Biotechnological Project *Marjan De Mey -- Department of Biotechnology*	6		2	A:J	180
5	I700233	Gene Technology [en] *Tina Kyndt -- Department of Biotechnology*	4		3	A:1	120
6	I700232	Enzyme Technology *Yves Briers -- Department of Biotechnology*	5		3	A:1	150
7	I700225	Instrumental Analytical Chemistry *Pieter Vermeir -- Department of Green Chemistry and Technology*	5		3	A:2	150
8	I700040	Human Nutrition *Kathy Messens -- Department of Biotechnology*	3		3	A:2	90
9	I700152	Process Technology II *Mia Eeckhout -- Department of Food Technology, Safety and Health*	4		3	A:2	120
10	I700234	Molecular Biotechnology *Yves Briers -- Department of Biotechnology*	4		3	A:2	120
11	I700154	Industrial Microbiology *Leen De Gelder -- Department of Biotechnology*	4		3	A:2	120
12	I700235	Bioinformatics *Noémie De Zutter -- Department of Plants and Crops*	4		3	A:2	120

2.2 Agriculture

54 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I700212	Plant Physiology *Kris Audenaert -- Department of Plants and Crops*	5		2	A:1	150
2	I700213	Animal Physiology *Thomas Van Hecke -- Department of Animal Sciences and Aquatic Ecology*	5		2	A:1	150
3	I700240	Soil Science *Steven Sleutel -- Department of Environment*	3		2	A:2	90
4	I700018	Plant Production and Ecophysiology *Steven Maenhout -- Department of Plants and Crops*	4		2	A:2	120
5	I700042	Reproductive Physiology of Animals *Thomas Van Hecke -- Department of Animal Sciences and Aquatic Ecology*	4		2	A:2	120
6	I700238	Agrobiotechnology *Stefaan Werbrouck -- Department of Plants and Crops*	4		3	A:1	120

7	I700285	Animal Production Systems *Jeroen Degroote -- Department of Animal Sciences and Aquatic Ecology*	5	3	A:1	150
8	I700179	Sustainable Production Systems *Frank Nevens -- Department of Plants and Crops*	3	3	A:2	75
9	I700174	Applied Plant Breeding *Steven Maenhout -- Department of Plants and Crops*	3	3	A:2	90
10	I700279	Identification and Diagnosis of Plant Diseases, Pests and Weeds *Kris Audenaert -- Department of Plants and Crops*	6	3	A:2	180
11	I700034	Plant Nutrition and Soil Management *Stefaan De Neve -- Department of Environment*	4	3	A:2	120
12	I700289	Agricultural Machinery *Bart Sonck -- Department of Animal Sciences and Aquatic Ecology*	4	3	A:2	120
13	I700290	Livestock Housing *Bart Sonck -- Department of Animal Sciences and Aquatic Ecology*	4	3	A:2	120

2.3 Horticulture 54 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I700212	Plant Physiology *Kris Audenaert -- Department of Plants and Crops*	5		2	A:1	150
2	I700213	Animal Physiology *Thomas Van Hecke -- Department of Animal Sciences and Aquatic Ecology*	5		2	B:1	150
3	I700240	Soil Science *Steven Sleutel -- Department of Environment*	3		2	A:2	90
4	I700018	Plant Production and Ecophysiology *Steven Maenhout -- Department of Plants and Crops*	4		2	A:2	120
5	I700121	Controlled Greenhouse Systems *Emmy Dhooghe -- Department of Plants and Crops*	4		2	A:2	120
6	I700238	Agrobiotechnology *Stefaan Werbrouck -- Department of Plants and Crops*	3		3	B:1	90
7	I700294	Regulation of Plant Growth and Development *Emmy Dhooghe -- Department of Plants and Crops*	4		3	A:1	120
8	I700179	Sustainable Production Systems *Frank Nevens -- Department of Plants and Crops*	3		3	A:2	75
9	I700174	Applied Plant Breeding *Steven Maenhout -- Department of Plants and Crops*	3		3	A:2	90
10	I700279	Identification and Diagnosis of Plant Diseases, Pests and Weeds *Kris Audenaert -- Department of Plants and Crops*	6		3	A:2	180
11	I700034	Plant Nutrition and Soil Management *Stefaan De Neve -- Department of Environment*	4		3	A:2	120
12	I700291	Management of Urban Green Spaces *Jan Mertens -- Department of Environment*	3		3	A:2	90
13	I700293	Plant Propagation *Stefaan Werbrouck -- Department of Plants and Crops*	4		3	A:2	120
14	I700292	GIS *Frieke Vancoillie -- Department of Environment*	3		3	A:2	90

2.4 Food Industry 54 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I700212	Plant Physiology *Kris Audenaert -- Department of Plants and Crops*	5		2	A:1	150
2	I700213	Animal Physiology *Thomas Van Hecke -- Department of Animal Sciences and Aquatic Ecology*	5		2	A:1	150
3	I700027	Food Chemistry *Mia Eeckhout -- Department of Food Technology, Safety and Health*	8		2	A:2	240
4	I700270	Processing Technology of Potatoes, Vegetables, and Fruit *Imca Sampers -- Department of Food Technology, Safety and Health*	3		2	A:2	90
5	I700157	Molecular Analysis Techniques *Kathy Messens -- Department of Biotechnology*	4		3	A:1	120

6	I700222	Food Microbiology *Frank Devlieghere -- Department of Food Technology, Safety and Health*	5	3	A:1	150
7	I700225	Instrumental Analytical Chemistry *Pieter Vermeir -- Department of Green Chemistry and Technology*	5	3	A:2	150
8	I700040	Human Nutrition *Kathy Messens -- Department of Biotechnology*	3	3	A:2	90
9	I700152	Process Technology II *Mia Eeckhout -- Department of Food Technology, Safety and Health*	4	3	A:2	120
10	I700274	Technology and Functionality of Food Components *Filip Van Bockstaele -- Department of Food Technology, Safety and Health*	4	3	A:2	120
11	I700226	Food Preservation Technology *Imca Sampers -- Department of Food Technology, Safety and Health*	4	3	A:2	120
12	I700227	Rheology and Sensory Analysis *Filip Van Bockstaele -- Department of Food Technology, Safety and Health*	4	3	A:2	120

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 2027-2028	f: annually, from 2028-2029	i: annually, from 2029-2030
b: tri-annually	d: bi-annually, from 2027-2028	g: bi-annually, from 2028-2029	j: bi-annually, from 2029-2030
	e: tri-annually, from 2027-2028	h: tri-annually, from 2028-2029	k: tri-annually, from 2029-2030