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

Nr	Course		CRDT	Ref	MT1	Session	Study
21	I700217	Microbiology	5	2		A:2	150
		Leen De Gelder -- Department of Biotechnology					
22	I700218	Ecology	3	2		A:2	90
		Kim Calders -- Department of Environment					
23	I700219	Process Technology I	5	3		A:1	150
		Mia Eeckhout -- Department of Food Technology, Safety and Health					
24	I700224	Quality Management Systems in the Food Chain	3	3		A:1	90
		Liesbeth Jacxsens -- Department of Food Technology, Safety and Health					
25	I700220	Environmental Sciences	4	3		A:1	120
		Leen De Gelder -- Department of Biotechnology					
26	I700221	Entrepreneurship and Business Administration	6	3		A:1	180
		Joachim Schouteten -- Department of Agricultural Economics					
27	I700273	Bachelor Project	7	3		A:J	210
		Mia Eeckhout -- Department of Food Technology, Safety and Health					

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

2.2 Agriculture   54 credits

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

Nr	Course		CRDT	Ref	MT1	Session	Study
7	I700285	Animal Production Systems	5	3	A:1	150
		Jeroen Degroote -- Department of Animal Sciences and Aquatic Ecology					
8	I700179	Sustainable Production Systems	3	3	A:2	75
		Frank Nevens -- Department of Plants and Crops					
9	I700174	Applied Plant Breeding	3	3	A:2	90
		Steven Maenhout -- Department of Plants and Crops					
10	I700279	Identification and Diagnosis of Plant Diseases, Pests and Weeds	6	3	A:2	180
		Kris Audenaert -- Department of Plants and Crops					
11	I700034	Plant Nutrition and Soil Management	4	3	A:2	120
		Stefaan De Neve -- Department of Environment					
12	I700289	Agricultural Machinery	4	3	A:2	120
		Bart Sonck -- Department of Animal Sciences and Aquatic Ecology					
13	I700290	Livestock Housing	4	3	A:2	120
		Bart Sonck -- Department of Animal Sciences and Aquatic Ecology					

2.3 Horticulture   54 credits

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

2.4 Food Industry   54 credits

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

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

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