

Faculty of Bioscience Engineering

Bachelor of Science in Bioscience Engineering Technology

Language of instruction: Dutch

Programme version 9

## 1 General Courses

129 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	I700197 Programming I Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling	4		1	A:1	120
3	I700198 Mechanics, Oscillations and Waves Dirk Poelman -- Department of Solid State Sciences	6		1	A:1	180
4	I700199 General Chemistry I Pieter Vermeir -- Department of Green Chemistry and Technology	6		1	A:1	180
5	I700200 Zoology: Morphology and Systematics Joris Michiels -- 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	I700203 Programming II Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling	3		1	A:2	90
9	I700204 Thermodynamics Frederik Ronsse -- Department of Green Chemistry and Technology	4		1	A:2	120
10	I700205 General Chemistry II Pieter Vermeir -- Department of Green Chemistry and Technology	4		1	A:2	120
11	I700206 Organic Chemistry Sven Mangelinckx -- Department of Green Chemistry and Technology	5		1	A:2	150
12	I700207 Biochemistry Jessika De Clippeleer -- Department of Biotechnology	5		1	A:2	150
13	I700190 Cell Biology Kris Audenaert -- Department of Plants and Crops	4		1	A:2	120
14	I700208 Differential Equations Bernard De Baets -- 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	I700214 Probability Theory and Statistics Bernard De Baets -- Department of Data Analysis and Mathematical Modelling	4		2	A:2	120
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	I700223	Statistical Data Analysis Stijn Luca -- Department of Data Analysis and Mathematical Modelling	4	3	A:2	120
28	I700040	Human Nutrition Kathy Messens -- Department of Biotechnology	3	3	A:2	90
29	I700151	Bachelor Project Ingrid De Leyn -- Department of Food Technology, Safety and Health	5	3	A:J	150

## 2 Elective Courses

Subscribe to 1 from the following list.

### 2.1

51 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I700212 Plant Physiology Geert Haesaert -- Department of Plants and Crops	5		2	A:1	150
2	I700213 Animal Physiology Dirk Fremaut -- 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 Geert Haesaert -- Department of Plants and Crops	4		2	A:2	120
5	I700042 Reproductive Physiology of Animals Dirk Fremaut -- 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	I700236 Digestive Physiology of Animals Dirk Fremaut -- Department of Animal Sciences and Aquatic Ecology	5		3	A:1	150
8	I700174 Applied Plant Breeding Geert Haesaert -- Department of Plants and Crops	3		3	A:2	90
9	I700020 Crop Protection Geert Haesaert -- Department of Plants and Crops	6		3	A:2	180
10	I700034 Plant Nutrition and Soil Management Stefaan De Neve -- Department of Environment	4		3	A:2	120
11	I700026 Livestock Housing and Agricultural Machinery Bart Sonck -- Department of Animal Sciences and Aquatic Ecology	8		3	A:2	240

### 2.2

51 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I700212 Plant Physiology Geert Haesaert -- Department of Plants and Crops	5		2	A:1	150
2	I700213 Animal Physiology Dirk Fremaut -- 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	I700120 Horticultural Crops Stefaan Werbrouck -- 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	4		3	A:1	120

7	I700035	Plant Tissue Culture Stefaan Werbrouck -- Department of Plants and Crops	4	3	A:1	120
8	I700237	Pomology Filip Debersaques -- Department of Plants and Crops	5	3	A:1	150
9	I700174	Applied Plant Breeding Geert Haesaert -- Department of Plants and Crops	3	3	A:2	90
10	I700020	Crop Protection Geert Haesaert -- 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	I700239	Glasshouse Vegetable Production Emmy Dhooghe -- Department of Plants and Crops	4	3	A:2	120

### 2.3

51 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I700212	Plant Physiology Geert Haesaert -- Department of Plants and Crops	5	2	A:1	150
2	I700213	Animal Physiology Dirk Fremaut -- 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	I700152	Process Technology II Mia Eeckhout -- Department of Food Technology, Safety and Health	4	3	A:2	120
9	I700271	Technology and Functionality of Food Ingredients Filip Van Bockstaele -- Department of Food Technology, Safety and Health	4	3	A:2	120
10	I700226	Food Preservation Technology Tony Ruysen -- Department of Food Technology, Safety and Health	4	3	A:2	120
11	I700227	Rheology and Sensory Analysis Filip Van Bockstaele -- Department of Food Technology, Safety and Health	4	3	A:2	120

### 2.4

51 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I700228	Analysis and Separation of Biomolecules Jessika De Clippeleer -- Department of Biotechnology	6	2	A:1	180
2	I700229	Supplementary Biochemistry David Laureys -- 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 David Laureys -- 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	I700152	Process Technology II Mia Eeckhout -- Department of Food Technology, Safety and Health	4	3	A:2	120
9	I700234	Molecular Biotechnology Philippe De Groote -- Department of Biotechnology	4	3	A:2	120

10	I700154	Industrial Microbiology Inge Van Bogaert -- Department of Biotechnology	4	3	A:2	120
11	I700235	Bioinformatics Willem Desmedt -- Department of Plants and Crops	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 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