

## Study Programme

Academic year 2024-2025

Faculty of Bioscience Engineering
Bachelor of Science in Bioscience Engineering Technology

Language of instruction: Dutch

Programme version 10

1	Genera	l Courses			129	credits
Nr	Course		CRDT	Ref MT1	Session	Study
1	1700266	Calculus I  Jan Baetens Department of Data Analysis and Mathematical Modelling	6	1	A:1	180
2	1700197	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	1700199	General Chemistry I Pieter Vermeir Department of Green Chemistry and Technology	6	1	A:1	180
5	1700200	Zoology: Morphology and Systematics Ilias Semmouri Department of Animal Sciences and Aquatic Ecology	4	1	A:1	120
6	1700201	Botany: Morphology and Diversity Pieter De Frenne Department of Environment	4	1	A:1	120
7	1700267	Linear Algebra and Calculus II Jan Baetens Department of Data Analysis and Mathematical Modelling	5	1	A:2	150
8	1700203	Programming II Jan Verwaeren Department of Data Analysis and Mathematical Modelling	3	1	A:2	90
9	1700204	Thermodynamics Frederik Ronsse Department of Green Chemistry and Technology	4	1	A:2	120
10	1700205	General Chemistry II Pieter Vermeir Department of Green Chemistry and Technology	4	1	A:2	120
11	1700206	Organic Chemistry Sven Mangelinckx Department of Green Chemistry and Technology	5	1	A:2	150
12	1700207	Biochemistry Jessika De Clippeleer Department of Biotechnology	5	1	A:2	150
13	1700190	Cell Biology Kris Audenaert Department of Plants and Crops	4	1	A:2	120
14	1700208	Differential Equations Michiel Stock Department of Data Analysis and Mathematical Modelling	4	2	A:1	120
15	1700269	Applied Fluid Mechanics Niko Verhoest Department of Environment	5	2	A:1	150
16	1700209	Electricity and Magnetism Toon Verstraelen Department of Physics and Astronomy	4	2	A:1	120
17	1700216	Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology	6	2	A:1	180
18	1700272	Probability Theory and Statistics Stijn Luca Department of Data Analysis and Mathematical Modelling	6	2	A:2	180
19	1700268	Optics and Sensors Philippe Smet Department of Solid State Sciences	3	2	A:2	90
20	1700211	Genetics Kris Audenaert Department of Plants and Crops	5	2	A:2	150
21	1700217	Microbiology Leen De Gelder Department of Biotechnology	5	2	A:2	150
	1700217	Leen De Gelder Department of Biotechnology	5	2	A:2	

22 1700218	Ecology Kim Calders Department of Environment	3	2	A:2	90
23 1700219	Process Technology I Mia Eeckhout Department of Food Technology, Safety and Health	5	3	A:1	150
24 1700224	Quality Management Systems in the Food Chain Liesbeth Jacxsens Department of Food Technology, Safety and Health	3	3	A:1	90
25 1700220	Environmental Sciences Leen De Gelder Department of Biotechnology	4	3	A:1	120
26 1700221	Entrepreneurship and Business Administration  Joachim Schouteten Department of Agricultural Economics	6	3	A:1	180
27 1700040	Human Nutrition Kathy Messens Department of Biotechnology	3	3	A:2	90
28 1700273	Bachelor Project Ingrid De Leyn Department of Food Technology, Safety and Health	7	3	A:J	210

## 2 Elective Courses

Subscribe to 1 from the following list.

2.1

51 credits

Nr Course		CRDT R	ef MT1	Session	Study
1 1700212	Plant Physiology Kris Audenaert Department of Plants and Crops	5	2	A:1	150
2 1700213	Animal Physiology	5	2	A:1	150
3 1700240	Soil Science Steven Sleutel Department of Environment	3	2	A:2	90
4 1700018	Plant Production and Ecophysiology	4	2	A:2	120
5 1700042	Reproductive Physiology of Animals	4	2	A:2	120
6 1700238	Agrobiotechnology Stefaan Werbrouck Department of Plants and Crops	4	3	A:1	120
7 1700236	Digestive Physiology of Animals Veerle Fievez Department of Animal Sciences and Aquatic Ecology	5	3	A:1	150
8 I700174	Applied Plant Breeding Steven Maenhout Department of Plants and Crops	3	3	A:2	90
9 1700020	Crop Protection Kris Audenaert Department of Plants and Crops	6	3	A:2	180
10 1700034	Plant Nutrition and Soil Management Stefaan De Neve Department of Environment	4	3	A:2	120
11 1700026	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 R	≃f MT1	Session	Study
1	1700212	Plant Physiology Kris Audenaert Department of Plants and Crops	5	2	A:1	150
2	1700213	Animal Physiology	5	2	A:1	150
3	1700240	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	1700238	Agrobiotechnology Stefaan Werbrouck Department of Plants and Crops	4	3	A:1	120
7	1700035	Plant Tissue Culture Stefaan Werbrouck Department of Plants and Crops	4	3	A:1	120
8	1700237	Pomology Filip Debersaques Department of Plants and Crops	5	3	A:1	150
9	I700174	Applied Plant Breeding Steven Maenhout Department of Plants and Crops	3	3	A:2	90
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	Khis Audenaeri Department of Plants and Crops				
11 1700034	Plant Nutrition and Soil Management Stefaan De Neve Department of Environment	4	3	A:2	120
12 1700239	Glasshouse Vegetable Production Emmy Dhooghe Department of Plants and Crops	4	3	A:2	120
2.3				51	1 credits
Nr Course		CRDT	Ref MT1	Session	Study
1 1700212	Plant Physiology Kris Audenaert Department of Plants and Crops	5	2	A:1	150
2 1700213	Animal Physiology	5	2	A:1	150
3 1700027	Food Chemistry Mia Eeckhout Department of Food Technology, Safety and Health	8	2	A:2	240
4 1700270	Processing Technology of Potatoes, Vegetables, and Fruit Imca Sampers Department of Food Technology, Safety and Health	3	2	A:2	90
5 1700157	Molecular Analysis Techniques Kathy Messens Department of Biotechnology	4	3	A:1	120
6 1700222	Food Microbiology Frank Devlieghere Department of Food Technology, Safety and Health	5	3	A:1	150
7 1700225	Instrumental Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology	5	3	A:2	150
8 1700152	Process Technology II  Mia Eeckhout Department of Food Technology, Safety and Health	4	3	A:2	120
9 1700274	Technology and Functionality of Food Components Filip Van Bockstaele Department of Food Technology, Safety and Health	4	3	A:2	120
10 1700226	Food Preservation Technology Imca Sampers Department of Food Technology, Safety and Health	4	3	A:2	120
11 1700227	Rheology and Sensory Analysis Filip Van Bockstaele Department of Food Technology, Safety and Health	4	3	A:2	120
11 I700227 2.4		4	3		120 1 credits
2.4			<b>3</b> Ref MT1	51	
					1 credits
2.4 Nr Course	Filip Van Bockstaele Department of Food Technology, Safety and Health  Analysis and Separation of Biomolecules	CRDT I	Ref MT1	51 Session	1 credits
2.4 Nr Course 1 1700228	Filip Van Bockstaele Department of Food Technology, Safety and Health  Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry	CRDT I	Ref MT1 2	Session A:1	1 credits Study 180
2.4  Nr Course 1 1700228 2 1700229	Filip Van Bockstaele Department of Food Technology, Safety and Health  Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry Kathy Messens Department of Biotechnology  Balances of Biochemical and Chemical Processes	CRDT   6	Ref MT1 2 2	Session A:1 A:2	1 credits Study 180 150
2.4  Nr Course 1 1700228 2 1700229 3 1700231	Filip Van Bockstaele Department of Food Technology, Safety and Health  Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry Kathy Messens Department of Biotechnology  Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology	CRDT 1 6 5 4	Ref MT1 2 2 2	Session A:1 A:2 A:2	1 credits Study 180 150 120
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology Supplementary Biochemistry Kathy Messens Department of Biotechnology Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology Biotechnological Project Gene Technology [en] Tina Kyndt Department of Biotechnology	CRDT I 6 5 4 6	Ref MT1 2 2 2 2 2 2	Session A:1 A:2 A:2 A:3	1 credits  Study 180 150 120 180
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230 5 1700233	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry Kathy Messens Department of Biotechnology  Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology  Biotechnological Project  Gene Technology [en] Tina Kyndt Department of Biotechnology  Enzyme Technology	CRDT 1 6 5 4 6 4	Ref MT1 2 2 2 2 2 3	Session A:1 A:2 A:2 A:1 A:1	1 credits  Study 180 150 120 180 120
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230 5 1700233 6 1700232	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology Supplementary Biochemistry Kathy Messens Department of Biotechnology Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology Biotechnological Project Gene Technology [en] Tina Kyndt Department of Biotechnology Enzyme Technology Yves Briers Department of Biotechnology Instrumental Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology	CRDT 1 6 5 4 6 4 5	Ref MT1 2 2 2 2 2 3 3	Session A:1 A:2 A:2 A:1 A:1 A:1	1 credits  Study 180  150  120  180 120  150
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230 5 1700233 6 1700232 7 1700225	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry Kathy Messens Department of Biotechnology  Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology  Biotechnological Project  Gene Technology [en] Tina Kyndt Department of Biotechnology  Enzyme Technology Yves Briers Department of Biotechnology  Instrumental Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology Process Technology II	CRDT   6	2 2 2 2 3 3 3 3 3	Session A:1 A:2 A:2 A:1 A:1 A:1 A:1	1 credits  Study 180 150 120 180 120 150 150
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230 5 1700233 6 1700232 7 1700225 8 1700152	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology  Supplementary Biochemistry Kathy Messens Department of Biotechnology  Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology  Biotechnological Project  Gene Technology [en] Tina Kyndt Department of Biotechnology  Enzyme Technology Yves Briers Department of Biotechnology  Instrumental Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology  Process Technology II Mia Eeckhout Department of Food Technology, Safety and Health Molecular Biotechnology	CRDT 1 6 5 4 6 4 5 5	Ref MT1 2 2 2 2 2 3 3 3 3	Session A:1 A:2 A:2 A:3 A:1 A:1 A:2 A:2 A:2	1 credits  Study 180 150 120 180 120 150 150 150 120
2.4  Nr Course 1 1700228 2 1700229 3 1700231 4 1700230 5 1700233 6 1700232 7 1700225 8 1700152 9 1700234	Analysis and Separation of Biomolecules Jessika De Clippeleer Department of Biotechnology Supplementary Biochemistry Kathy Messens Department of Biotechnology Balances of Biochemical and Chemical Processes Leen De Gelder Department of Biotechnology Biotechnological Project Gene Technology [en] Tina Kyndt Department of Biotechnology Enzyme Technology Yves Briers Department of Biotechnology Instrumental Analytical Chemistry Pieter Vermeir Department of Green Chemistry and Technology Process Technology II Mia Eeckhout Department of Food Technology, Safety and Health Molecular Biotechnology Yves Briers Department of Biotechnology Industrial Microbiology	CRDT 6 5 4 6 4 5 5 4 4 4	2 2 2 3 3 3 3 3 3 3 3 3	Session A:1 A:2 A:2 A:1 A:1 A:1 A:2 A:2 A:2 A:2 A:2	1 credits  Study 180 150 120 180 120 150 150 150 120

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A:2

180

10 1700020

Crop Protection

Kris Audenaert -- Department of Plants and Crops

## 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 2025-2026 f: annually, from 2026-2027 i: annually, from 2027-2028 b: tri-annually d: bi-annually, from 2025-2026 g: bi-annually, from 2026-2027 j: bi-annually, from 2027-2028 h: tri-annually, from 2026-2027 k: tri-annually, from 2027-2028