GHENT UNIVERSITY

Study Programme

Academic year 2022-2023

Faculty of Bioscience Engineering

Bachelor of Science in Bioscience Engineering -- Land, Water and Climate

Language of instruction: Dutch

Programme version 1

1 General Courses — 150 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I002416	Calculus *Jan Baetens -- Department of Data Analysis and Mathematical Modelling*	6		1	A:1	180
2	I002417	Mechanics, Vibrations and Waves *Dirk Poelman -- Department of Solid State Sciences*	5		1	A:1	150
3	I002418	General and Inorganic Chemistry: Structure *Rik Van Deun -- Department of Chemistry*	5		1	A:1	150
4	I002419	Cellular and Molecular Biology *Godelieve Gheysen -- Department of Biotechnology*	4		1	A:1	120
5	I002420	Applied Botany: Morphology and Diversity *Pieter De Frenne -- Department of Environment*	5		1	A:1	150
6	I002421	Scientific Computing *Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling*	5		1	A:J	150
7	I002422	Linear Algebra *Willem Waegeman -- Department of Data Analysis and Mathematical Modelling*	5		1	A:2	150
8	I002423	Thermodynamic Processes *Frederik Ronsse -- Department of Green Chemistry and Technology*	5		1	A:2	150
9	I002424	General and Inorganic Chemistry: Reactivity and Analysis *Rik Van Deun -- Department of Chemistry*	6		1	A:2	180
10	I002425	Applied Zoology: Invertebrates *Luc Tirry -- Department of Plants and Crops*	5		1	A:2	150
11	I002426	Earth Sciences *Marc Van Meirvenne -- Department of Environment*	5		1	A:2	150
12	I002427	Ecology *Kathy Steppe -- Department of Plants and Crops*	4		1	A:2	120
13	I002428	Differential Equations *Bernard De Baets -- Department of Data Analysis and Mathematical Modelling*	5		2	A:1	150
14	I002429	Electricity, Magnetism and Sensors *Toon Verstraelen -- Department of Physics and Astronomy*	5		2	A:1	150
15	I002430	Applied Zoology: Vertebrates *Luc Tirry -- Department of Plants and Crops*	4		2	A:1	120
16	I002431	Applied Botany: Physiology *Kathy Steppe -- Department of Plants and Crops*	5		2	A:1	150
17	I002432	Organic Chemistry: Structure *Matthias D'hooghe -- Department of Green Chemistry and Technology*	3		2	A:1	90
18	I002433	Biochemistry *Els Van Damme -- Department of Biotechnology*	4		2	A:1	120
19	I002434	Sustainable Development in Production and Consumption Systems *Joost Dessein -- Department of Agricultural Economics*	5		2	A:2	150
20	I002435	Probabilistic Models *Bernard De Baets -- Department of Data Analysis and Mathematical Modelling*	5		2	A:2	150
21	I002436	Microbiology *Wim Soetaert -- Department of Biotechnology*	5		2	A:2	150

22	I002437	Organic Chemistry: Reactivity *Matthias D'hooghe -- Department of Green Chemistry and Technology*	7	2	A:2	210
23	I002438	Fluid Mechanics *Niko Verhoest -- Department of Environment*	3	2	A:2	90
24	I002439	Environmental Sciences *Marc Van Meirvenne -- Department of Environment*	4	2	A:1	120
25	I002440	Data Science *Jan Verwaeren -- Department of Data Analysis and Mathematical Modelling*	5	2	A:2	150
26	I002441	Statistical Data Processing *Stijn Luca -- Department of Data Analysis and Mathematical Modelling*	4	3	A:1	120
27	I002442	Process Engineering [en] *Jo Dewulf -- Department of Green Chemistry and Technology*	4	3	A:2	120
28	I002443	Heat and Mass Transport *Jan Pieters -- Department of Plants and Crops*	4	3	A:1	120
29	I002444	Chemical Analytical Techniques *Kristof Demeestere -- Department of Green Chemistry and Technology*	4	3	A:2	120
30	I002445	Modelling and Simulation of Biosystems [en] *David Fernandes del Pozo -- Department of Data Analysis and Mathematical Modelling*	4	3	A:2	120
31	I002446	Economics *Wim Verbeke -- Department of Agricultural Economics*	4	3	A:1	120
32	I002447	Bachelor Thesis *Niko Verhoest -- Department of Environment*	6	3	A:J	180

2 Courses Related to the Main Subject — 30 credits

Nr	Course		CRDT	Ref	MT1	Session	Study
1	I002448	Soil Science *Stefaan De Neve -- Department of Environment*	5		3	A:1	150
2	I002449	Hydrological Processes and Hydrometry *Niko Verhoest -- Department of Environment*	3		3	A:1	90
3	I002450	Remote Sensing *Frieke Vancoillie -- Department of Environment*	5		3	A:1	150
4	I002451	Land–Atmosphere Interactions [en] *Diego Miralles -- Department of Environment*	4		3	A:1	120
5	I002452	Geographic Information Systems: Basics *Frieke Vancoillie -- Department of Environment*	3		3	A:2	90
6	I002453	Biogeochemical Cycles *Steven Sleutel -- Department of Environment*	5		3	A:2	150
7	I002454	Geostatistics [en] *Ellen Van De Vijver -- Department of Environment*	5		3	A:2	150

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 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