

Faculty of Bioscience Engineering

Bachelor of Science in Bioscience Engineering -- Environmental Technology

Language of instruction: Dutch

Programme version 5

## 1 General Courses 150 credits

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

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

## 2 Courses Related to the Main Subject 30 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002503 Environmental Chemistry <i>Christophe Walgraeve -- Department of Green Chemistry and Technology</i>	6		3	A:1	180
2	I002504 Applied Freshwater Ecology [en] <i>Peter Goethals -- Department of Animal Sciences and Aquatic Ecology</i>	3		3	A:1	90
3	I002505 Microbial Ecological Processes <i>Jo De Vrieze -- Department of Biotechnology</i>	4		3	A:1	120
4	I002701 Clean Technology: Theory and Concepts [en] <i>Pieter Nachtergaele -- Department of Green Chemistry and Technology</i>	3		3	A:1	90
5	I002507 Environmental Technology: Solid Waste Streams <i>Frederik Ronsse -- Department of Green Chemistry and Technology</i>	4		3	A:2	120
6	I002508 Environmental Technology: Water [en] <i>Korneel Rabaey -- Department of Biotechnology</i>	6		3	A:2	180
7	E039060 Sustainable Energy and Rational Use of Energy [en] <i>Jeroen Beeckman -- Department of Electronics and Information Systems</i>	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 2022-2023	f: annually, from 2023-2024	i: annually, from 2024-2025
b: tri-annually	d: bi-annually, from 2022-2023	g: bi-annually, from 2023-2024	j: bi-annually, from 2024-2025
	e: tri-annually, from 2022-2023	h: tri-annually, from 2023-2024	k: tri-annually, from 2024-2025