GHENT UNIVERSITY

Study Programme

Academic year 2023-2024

Faculty of Sciences

Exchange programme in Biochemistry and Biotechnology (master's level)

Language of instruction: English

Programme version 5

1 General Courses

The exchange programme contains a preferred list of English courses taught at UGent of the Master of Science in Biochemistry and Biotechnology.
Tips for completing your Learning Agreement:

- Please check the departmental rules for incoming students.
- A minimum number of 24 ECTS per semester (or 48 ECTS per year) should be chosen.
- 80% of the credits should be chosen from the course programme in Biochemistry and Biotechnology (i.e. minimum 19 credits on a total of 24 ECTS).
- Short or long term (up to 1 year) research projects can be chosen. Students should have an agreement with a promoter at the faculty of Sciences (UGent) prior to sending their learning agreement, and include the letter of acceptance with their application.

Nr	Course		CRDT	Ref	MT1	Session	Study
1	C003525	Structure and Function of Biological Macromolecules *Savvas Savvides -- Department of Biochemistry, Physiology and Microbiology*	4			A:1	120
2	C003526	Structural Bioinformatics *Savvas Savvides -- Department of Biochemistry, Physiology and Microbiology*	3			A:1	80
3	C000500	Bioinformatics 2 *Yves Van de Peer -- Department of Plant Biotechnology and Bioinformatics*	3			A:2	80
4	C003527	Biostatistics *Caroline De Tender -- Department of Biochemistry, Physiology and Microbiology*	4			A:1	120
5	C003671	Biotechnology and Society *Nick Vangheluwe -- Department of Plant Biotechnology and Bioinformatics*	3			A:J	80
6	C003616	Systems Biology *Bert De Rybel -- Department of Plant Biotechnology and Bioinformatics*	4			A:2	120
7	C002381	Biotechnology: Biosafety, GMP and Intellectual Property *Koen Vanhalst -- Department of Molecular Biology*	3			A:1	80
8	C002865	Bioethics *Farah Focquaert -- Department of Philosophy and Moral Sciences*	3			A:1	80
9	C002732	Programming for Bioinformatics *Pieter De Bleser -- Department of Molecular Biology*	6			A:1	160
10	C002700	Comparative Genomics *Klaas Vandepoele -- Department of Plant Biotechnology and Bioinformatics*	3			A:2	80
11	C004456	Linux for Bioinformatics Environment *Herman De Beukelaer -- Department of Plant Biotechnology and Bioinformatics*	3			A:2	80
12	C003083	Bioinformatics Algorithms *Veerle Fack -- Department of Mathematics, Computer Science and Statistics*	3			A:2	80
13	C003617	Modelling of Biological Systems *Steven Maere -- Department of Plant Biotechnology and Bioinformatics*	3			A:1	80
14	C002703	Data Mining *Yvan Saeys -- Department of Mathematics, Computer Science and Statistics*	3			A:1	80
15	C003085	Databases for Bioinformatics *Pieter De Bleser -- Department of Molecular Biology*	3			A:1	80
16	C003086	Proteomics *Bart Devreese -- Department of Biochemistry, Physiology and Microbiology*	3			A:1	80
17	C003670	Biomolecular Production Methods *Leander Meuris -- Department of Biochemistry, Physiology and Microbiology*	4			A:1	110

18	C003088	Drug Design *Savvas Savvides -- Department of Biochemistry, Physiology and Microbiology*	3	A:2	80
19	C003615	Experimental Structural Biology *Savvas Savvides -- Department of Biochemistry, Physiology and Microbiology*	5	A:2	135
20	C002695	Bionanotechnology *Kevin Braeckmans -- Department of Pharmaceutics*	3	A:1	80
21	C002717	Metabolic Engineering *Alain Goossens -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
22	C002713	Glycobiology *Loes van Schie -- Department of Biochemistry, Physiology and Microbiology*	3	A:1	80
23	C002725	Molecular Pathophysiology and Experimental Therapy *Charlotte Scott -- Department of Molecular Biology*	6	A:1	160
24	C002738	Transgenetics of Animal Model Organisms *Claude Libert -- Department of Molecular Biology*	6	A:2	160
25	C002708	Experimental Molecular Cell Biology *Rudi Beyaert -- Department of Molecular Biology*	3	A:2	80
26	C002716	Human Genetics and Genetic Diseases *Bruce Poppe -- Department of Biomolecular Medicine*	3	A:1	80
27	C002722	Molecular Cancer Biology *Geert Berx -- Department of Molecular Biology*	3	A:1	80
28	C002728	Neurobiology *Geert van Loo -- Department of Molecular Biology*	3	A:1	80
29	C002711	Food Microbiology and Safety *Kurt Houf -- Department of Veterinary and Biosciences*	3	A:1	80
30	C004007	Molecular Bacteria-Host Interactions *Petra Van Damme -- Department of Biochemistry, Physiology and Microbiology*	3	A:2	80
31	C002715	Host-Virus Interactions *Xavier Saelens -- Department of Biochemistry, Physiology and Microbiology*	3	A:1	80
32	C002719	Microbial Genomics *Aurélien Carlier -- Department of Biochemistry, Physiology and Microbiology*	3	A:2	80
33	C002724	Molecular Microbial Ecology *Marie Joossens -- Department of Biochemistry, Physiology and Microbiology*	3	A:2	80
34	C003095	Plant Environment Interactions *Dominique Van Der Straeten -- Department of Biology*	3	A:1	80
35	C003097	Plant Biotic Interactions *Sofie Goormachtig -- Department of Plant Biotechnology and Bioinformatics*	3	A:2	80
36	C003098	The Plant Cell *Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics*	3	A:2	80
37	C003099	Plant Growth and Development *Moritz Nowack -- Department of Plant Biotechnology and Bioinformatics*	3	A:2	80
38	C003100	Molecular Plant Breeding *Tom Ruttink -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
39	C003102	The Plant Factory *Frank Van Breusegem -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
40	C003825	Functional Plant Genomics *Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
41	C003618	Advanced Plant Biotic Interactions *Bartel Vanholme -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
42	C003163	Plant Yield *Hilde Nelissen -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
43	C004006	Advanced Plant Cell Biology and Signaling *Daniël Van Damme -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
44	C002681	Advanced Programming in Bioinformatics *Pieter De Bleser -- Department of Molecular Biology*	3	A:1	80
45	C002720	Molecular and Experimental Immunology *Martin Guilliams -- Department of Molecular Biology*	3	A:1	80
46	C002697	Biotechnological Techniques in Medical Diagnostics *Dieter Deforce -- Department of Pharmaceutics*	3	B:2	80

47	C002699	Cellular Stress, Cell Death and Senescence *Mathieu Bertrand -- Department of Molecular Biology*	3	A:1	80
48	C003311	Phylogenetics *Olivier De Clerck -- Department of Biology*	4	A:1	120
49	C002714	Host-Parasite Interactions *Dirk de Graaf -- Department of Biochemistry, Physiology and Microbiology*	3	A:1	80
50	C002737	The Eukaryotic Cell Cycle *Lieven De Veylder -- Department of Plant Biotechnology and Bioinformatics*	3	A:1	80
51	C002706	Epigenetics *Wim Vanden Berghe -- Department of Molecular Biology*	3	A:1	80
52	C002727	Molecular Simulations of Biosystems *Toon Verstraelen -- Department of Physics and Astronomy*	3	A:1	80
53	C004455	Advanced Biomolecular 3D-structure Determination by X-ray Crystallography and Cryo-Electron Microscopy *Kenneth Verstraete -- Department of Biochemistry, Physiology and Microbiology*	3	A:1	80
54	C003695	Applied High-throughput Analysis *Tim De Meyer -- Department of Data Analysis and Mathematical Modelling*	6	A:1	180
55	C004394	Microbes in Biotechnology *Marie Joossens -- Department of Biochemistry, Physiology and Microbiology*	6	A:1	150
56	C003242	Research Project	0	A:1, C:J, B:2	0

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 2024-2025	f: annually, from 2025-2026	i: annually, from 2026-2027
b: tri-annually	d: bi-annually, from 2024-2025	g: bi-annually, from 2025-2026	j: bi-annually, from 2026-2027
	e: tri-annually, from 2024-2025	h: tri-annually, from 2025-2026	k: tri-annually, from 2026-2027