

Study Programme

Academic year 2023-2024

Faculty of Bioscience Engineering

Master of Science in Bioscience Engineering: Food Science and Nutrition

Language of instruction: Dutch Programme version 13

1	1 General Courses					68 credits		
Nr	Course		CRDT	Ref MT1	Session	Study		
1	1002667	Colloid and Surface Chemistry Paul Van der Meeren Department of Green Chemistry and Technology	5	1	A:2	150		
2	1002668	Analytical Inorganic Chemistry: Instrumental Techniques Gijs Du Laing Department of Green Chemistry and Technology	3	1	A:1	90		
3	1002648	Human Nutrition John Van Camp Department of Food Technology, Safety and Health	5	1	A:1	150		
4	1002618	Process Engineering 2 [en] Paul Van der Meeren Department of Green Chemistry and Technology	5	1	A:1	150		
5	1002669	Food Technology [en] Koen Dewettinck Department of Food Technology, Safety and Health	5	1	A:1	150		
6	1002720	Consumer Behaviour and Marketing of Bio-industrial products Wim Verbeke Department of Agricultural Economics	5	1	A:2	150		
7	1002670	Biochemical and Functional Analysis of Foods Bruno De Meulenaer Department of Food Technology, Safety and Health	5	1	A:1	150		
8	1002721	Food Regulation [en] Liesbeth Jacxsens Department of Food Technology, Safety and Health	4	1	A:2	120		
9	1002672	Process Control [en] Paul Van Liedekerke Department of Data Analysis and Mathematical Modelling	5	1	A:2	150		
10	1002619	Management for Engineers [en] Jeroen Buysse Department of Agricultural Economics	4	2	A:1	120		
11	1002652	Quality Management and Risk Analysis [en] Liesbeth Jacxsens Department of Food Technology, Safety and Health	5	1	A:2	150		
12	1002673	Packaging Technology [en] Peter Ragaert Department of Food Technology, Safety and Health	5	1	A:2	150		
13	1002717	Functional Foods [en] John Van Camp Department of Food Technology, Safety and Health	5	2	A:2	150		
14	1002674	Product Innovation in the Food Industry	7	2	A:J	210		
2	Elective	Courses			22	credits		

Subscribe to 22 credit units from no less than 1 and no more than 5 from the following list. Subject to approval by the faculty. A complete major comprises 15 credit units.

Full-time standard learning track:

Students can choose which of the elective course units are taken in the first respectively the second standard learning track year (unless otherwise specified); in combination with the general course units, students take a total of 54 to 66 credits per standard learning track year. The sum of the total number of credits taken up over the 2 standard learning track years must be 120 credits.

2.1 Master Specific Courses

2.1.1 Food Technology

Nr	Course		CRDT Ref MT1	Session	Study
1	1002722	Sensory Analysis [en]	5	A:1	150
		Xavier Gellynck Department of Agricultural Economics			

2	1002723	Formulation and Structuring of Foods [en] Filip Van Bockstaele Department of Food Technology, Safety and Health	5	A:1	150
3	1002724	Technology of Animal Products Frank Devlieghere Department of Food Technology, Safety and Health	5	A:2	150
4	1002934	Technology of Plant-based Foods [en] Koen Dewettinck Department of Food Technology, Safety and Health	5	A:2	150
5	1002726	Food Fermentations [en] Katleen Raes Department of Food Technology, Safety and Health	4	A:2	120

2.1.2 Food Safety and Health

Nr	Course		CRDT	Ref	MT1	Session	Study
1	1002727	Nutrition Disorders [en] Carl Lachat Department of Food Technology, Safety and Health	5			A:1	150
2	1002728	Chemical Food Safety Bruno De Meulenaer Department of Food Technology, Safety and Health	5			A:1 ^a	150
3	1002729	Microbiological Food Safety Mieke Uyttendaele Department of Food Technology, Safety and Health	5			(A:1) ^d	150
4	1002730	Food and Nutrition Epidemiology [en] Carl Lachat Department of Food Technology, Safety and Health	5			A:2	150
5	1002596	Environmental Fate and Management of Pesticides [en] Pieter Spanoghe Department of Plants and Crops	6			A:1	180

2.2 Elective Courses from Related Fields of Study

Nr	Course		CRDT	Ref	MT1	Session	Study
1	1002612	Industrial Biotechnology [en] Wim Soetaert Department of Biotechnology	5			A:1	150
2	1700265	Malting and Brewing Technology Jessika De Clippeleer Department of Biotechnology	4			A:1	120
3	1002623	Interphase Processes of Host-associated Micro-organisms [en] Tom Van de Wiele Department of Biotechnology	5			A:1	150
4	1002617	Bio-imaging and Image Informatics [en] Andre Skirtach Department of Biotechnology	4			A:1	120
5	1002675	Chemical Structure Determination [en] Christian Stevens Department of Green Chemistry and Technology	4			A:1	120
6	1001280	Experimental Design [en] Stijn Luca Department of Data Analysis and Mathematical Modelling	3			A:2	75
7	1002701	Clean Technology: Theory and Concepts [en] Sophie Huysveld Department of Green Chemistry and Technology	3			A:1	90
8	1002719	Modelling and Simulation with Partial Differential Equations in Practice [en]	5			A:1	150

Ingmar Nopens -- Department of Data Analysis and Mathematical Modelling

2.3 Entrepreneurship and Management

Nr	Course		CRDT	Ref MT1	Session	Study
1	1001967	Intellectual Property and Valorization [en] Benedikt Sas Department of Food Technology, Safety and Health	3		A:2	90
2	1001949	Entrepreneurship Petra Andries Department of Marketing, Innovation and Organisation	3		A:2	75
3	E076460	Dare to Venture [en] Johan Verrue Department of Marketing, Innovation and Organisation	4		A:2	120
4	E076471	Dare to Start [en] Frank Gielen Department of Information Technology	3		A:2	90
5	C000833	Project Management Mario Vanhoucke Department of Business Informatics and Operations Management	4		A:2	120
6	F000710	Supply Chain Management [en] Louis-Philippe Kerkhove Department of Business Informatics and Operations Management	6		A:2	180

2.4 Skills and Attitudes

Subscribe to course units from the following list, with no more than 10 credit units with reference a.

Nr Course

1	1002637	Internship [en, nl] Paul Van der Meeren Department of Green Chemistry and Technology	5	а	A:J	150
2	1002638	International Internship [en, nl] Paul Van der Meeren Department of Green Chemistry and Technology	5	а	A:J	150
3	1002639	Extended Internship [en, nl] Paul Van der Meeren Department of Green Chemistry and Technology	10	а	A:J	300
4	1002640	Extended International Internship [en, nl] Paul Van der Meeren Department of Green Chemistry and Technology	10	а	A:J	300
5	1001944	Bio-ethics [en] Farah Focquaert Department of Philosophy and Moral Sciences	3		A:1	75
6	C002668	Scientific Communication in English [en] Geert Jacobs Department of Linguistics	5		A:2	150
7	1001784	Seminar [en, nl] Mieke Uyttendaele Department of Food Technology, Safety and Health	3		A:J	75

2.5 Open choice

Subscribe to course units from courses offered at Ghent University and at the alliance partner VUB, including the Ghent University

Elective Courses. A maximum of 2 such courses is allowed.

Maximum 8 credit units language courses are allowed within this master programme.

Subject to approval by the Faculty.

3	3 Master's Dissertation						credits
Nr	Course		CRDT	Ref	MT1	Session	Study
1	1001482	Master's Dissertation	30		2	A:J	900
		Liesbeth Jacxsens Department of Food Technology, Safety and Health					

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