

Faculty of Bioscience Engineering

Master of Science in Bioscience Engineering: Food Science and Nutrition

Language of instruction: Dutch

Programme version 12

1 General Courses 68 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I002667 Colloid and Surface Chemistry Paul Van der Meeren -- Department of Green Chemistry and Technology	5		1	A:2	150
2	I002668 Analytical Inorganic Chemistry: Instrumental Techniques Gijs Du Laing -- Department of Green Chemistry and Technology	3		1	A:1	90
3	I002648 Human Nutrition John Van Camp -- Department of Food Technology, Safety and Health	5		1	A:1	150
4	I002618 Process Engineering 2 [en, nl] Paul Van der Meeren -- Department of Green Chemistry and Technology	5		1	A:1	150
5	I002669 Food Technology [en] Koen Dewettinck -- Department of Food Technology, Safety and Health	5		1	A:1	150
6	I002720 Consumer Behaviour and Marketing of Bio-industrial products Wim Verbeke -- Department of Agricultural Economics	5		1	A:2	150
7	I002670 Biochemical and Functional Analysis of Foods Bruno De Meulenaer -- Department of Food Technology, Safety and Health	5		1	A:1	150
8	I002721 Food Regulation [en] Liesbeth Jacxsens -- Department of Food Technology, Safety and Health	4		1	A:2	120
9	I002672 Process Control Kimberly Tumlos Solon -- Department of Data Analysis and Mathematical Modelling	5		1	A:2	150
10	I002619 Management for Engineers [en, nl] Jeroen Buysse -- Department of Agricultural Economics	4		2	A:1	120
11	I002652 Quality Management and Risk Analysis [en] Liesbeth Jacxsens -- Department of Food Technology, Safety and Health	5		1	A:2	150
12	I002673 Packaging Technology [en] Peter Ragaert -- Department of Food Technology, Safety and Health	5		1	A:2	150
13	I002717 Functional Foods [en] Carl Lachat -- Department of Food Technology, Safety and Health	5		2	A:2	150
14	I002674 Product Innovation in the Food Industry Mieke Uyttendaele -- Department of Food Technology, Safety and Health	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	I002722 Sensory Analysis [en] Xavier Gellynck -- Department of Agricultural Economics	5			A:1	150

2	I002723	Formulation and Structuring of Foods [en] Filip Van Bockstaele -- Department of Food Technology, Safety and Health	5			A:1	150
3	I002724	Technology of Animal Products Frank Devlieghere -- Department of Food Technology, Safety and Health	5			A:2	150
4	I002725	Technology of Vegetable Products [en] Koen Dewettinck -- Department of Food Technology, Safety and Health	5			A:2	150
5	I002726	Food Fermentations [en] Katieleen 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	I002727 Nutrition Disorders [en] Carl Lachat -- Department of Food Technology, Safety and Health	5			A:1	150
2	I002728 Chemical Food Safety Bruno De Meulenaer -- Department of Food Technology, Safety and Health	5			A:1 ^a	150
3	I002729 Microbiological Food Safety Mieke Uyttendaele -- Department of Food Technology, Safety and Health	5			A:1 ^a	150
4	I002730 Food and Nutrition Epidemiology [en] Carl Lachat -- Department of Food Technology, Safety and Health	5			A:2	150
5	I002596 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	I002612 Industrial Biotechnology [en] Wim Soetaert -- Department of Biotechnology	5			A:1	150
2	I700265 Malting and Brewing Technology Jessika De Clippeleer -- Department of Biotechnology	4			A:1	120
3	I002623 Interphase Processes of Host-associated Micro-organisms [en] Tom Van de Wiele -- Department of Biotechnology	5			A:1	150
4	I002617 Bio-imaging and Image Informatics [en] Andre Skirtach -- Department of Biotechnology	4			A:1	120
5	I002675 Chemical Structure Determination Christian Stevens -- Department of Green Chemistry and Technology	4			A:1	120
6	I001280 Experimental Design [en] Stijn Luca -- Department of Data Analysis and Mathematical Modelling	3			A:2	75
7	I002701 Clean Technology: Theory and Concepts [en] Pieter Nachtergaele -- Department of Green Chemistry and Technology	3			A:1	90
8	I002719 Modelling and Simulation with Partial Differential Equations in Practice [en] Ingmar Nopens -- Department of Data Analysis and Mathematical Modelling	5			A:1	150

2.3 Entrepreneurship and Management

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I001967 Intellectual Property and Valorization [en] Benedikt Sas -- Department of Food Technology, Safety and Health	3			A:2	90
2	I001949 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] Tarik Aouam -- 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	CRDT	Ref	MT1	Session	Study
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1	I002637	Internship [en, nl] Tom Desmet -- Department of Biotechnology	5	a	A:J	150
2	I002638	International Internship [en, nl] Tom Desmet -- Department of Biotechnology	5	a	A:J	150
3	I002639	Extended Internship [en, nl] Tom Desmet -- Department of Biotechnology	10	a	A:J	300
4	I002640	Extended International Internship [en, nl] Tom Desmet -- Department of Biotechnology	10	a	A:J	300
5	I001944	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	I001784	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 Master's Dissertation 30 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	I001482 Master's Dissertation Liesbeth Jacxsens -- Department of Food Technology, Safety and Health	30		2	A:J	900

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