

Study Programme

Academic year 2020-2021

Faculty of Bioscience Engineering

Master of Science in Bioscience Engineering: Chemistry and Bioprocess Technology

Campus: UGent

Language(s) of instruction: Dutch (Programme sheet as of: 2018)

Programme version 12 Valid as from the academic year 2020-2021 (VOORSTEL)

IMCHEM12.1 General Courses - IMCHEMalg

58.0 credits

Nr Co	ourse		CRDT	Ref MT1 MT2	Session	Contact	Studv
1 10	02675	Chemical Structure Determination [nl] Christian Stevens Department of Green Chemistry and Technology	4.0	1	A:1	40.0	120
2 10	02667	Colloid and Surface Chemistry [nl] Paul Van der Meeren Department of Green Chemistry and Technolo	5.0 ogy	1	A:2	50.0	150
3 10	02612	Industrial Biotechnology [en] Wim Soetaert Department of Biotechnology	5.0	1	A:1	50.0	150
4 10	02668	Analytical Inorganic Chemistry: Instrumental Techniques [nl] Gijs Du Laing Department of Green Chemistry and Technology	3.0	1	A:1	30.0	90
5 10	02618	Process Engineering 2 [nl, en] Paul Van der Meeren Department of Green Chemistry and Technologies	5.0 ogy	1	A:1	50.0	150
6 10	02677	Thermochemical Conversion of Biomass [nl] Frederik Ronsse Department of Green Chemistry and Technology	4.0	1	A:2	40.0	120
7 10	02678	Bio-organic Chemistry [en] Christian Stevens Department of Green Chemistry and Technology	4.0	1	A:1	40.0	120
8 10	02679	Green Chemistry of Renewable Resources [en] Sven Mangelinckx Department of Green Chemistry and Technology	4.0	1	A:1	40.0	120
9 10	02672	Process Control [nl] Ingmar Nopens Department of Data Analysis and Mathematical Mod	5.0 Ielling	1	A:2	50.0	150
10 10	02700	Clean Technology [en] Sophie Huysveld Department of Green Chemistry and Technology	5.0	1	A:1	50.0	150
11 10	02680	Integrated Practical Classes in Advanced Organic Chemistry [nl] Christian Stevens Department of Green Chemistry and Technology	5.0	1	A:2	50.0	150
12 10	02619	Management for Engineers [nl, en] Jeroen Buysse Department of Agricultural Economics	4.0	2	A:1	40.0	120
13 10	02652	Quality Management and Risk Analysis [en] Liesbeth Jacxsens Department of Food Technology, Safety and Hea	5.0 alth	2	A:2	50.0	150
IMC	HEM1	2.2 Elective Courses - IMCHEMkeuze			31.	0 credits	S

Subscribe to 31 credit units from no less than 1 and no more than 6 module(s) from the following list. Subject to approval by the faculty.

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.

IMCHEM12.2.1 Product Development and Renewable Resources - IMCHEMkeuzeproduct

Nr			CRDT		Session	Contact	Study
1	1002753	Chemistry of Natural Products [en]	5.0		A:1	50.0	150
		Sven Mangelinckx Department of Green Chemistry and Technology					
2	E071341	Molecular Modelling of Industrial Processes [nl]	6.0		A:2	60.0	180
		Veronique Van Speybroeck Department of Applied Physics					
3	1002734	Crop Protection Chemistry [nl]	5.0		A:2	50.0	150
		Pieter Spanoghe Department of Plants and Crops					
4	C002553	Trends in Organic Chemistry [en]	6.0		A:2	86.0	158
		Annemieke Madder Department of Organic Chemistry					

6.0 5 C003246 Heterogeneous Catalysis [en] A:2 54.0 156 Pascal Van Der Voort -- Department of Inorganic and Physical Chemistry IMCHEM12.2.2 Chemical and/or Bioprocess Technology -**IMCHEMkeuzetechnologie** 1002631 1 Industrial Fermentation Processes and Downstream 5.0 A:2 50.0 150 Processing [en]

		Wim Soetaert Department of Biotechnology					
2	1002673	Packaging Technology [en] Peter Ragaert Department of Food Technology, Safety and Health	5.0		A:2	50.0	150
3	1002719	Modelling and Simulation with Partial Differential Equations in Practice [en] Ingmar Nopens Department of Data Analysis and Mathematical Mod			A:1	50.0	150
4	1002669	Food Technology [en] Koen Dewettinck Department of Food Technology, Safety and Heal	5.0 th		A:1	50.0	150
5	E039060	Sustainable Energy and Rational Use of Energy [en] Jeroen Beeckman Department of Electronics and Information Syste	4.0 ms		A:2	45.0	120
6	1700241	Brewing Technology [nl] Jessika De Clippeleer Department of Biotechnology	4.0		A:1	40.0	120
7	1002607	Resource Recovery Technology [en] Ramon Ganigué Department of Biotechnology	6.0		A:2	60.0	180
8	1001561	Industrial Chemistry [nl] Sven Mangelinckx Department of Green Chemistry and Technology	3.0 ′		A:2	30.0	75
9	1002776	Processes in Practice [en] Eveline Volcke Department of Green Chemistry and Technology	3.0		A:1	30.0	90
IN	ICHEM12	2.2.3 Chemical Analysis - IMCHEMkeuzeanalyse					
Nr	Course		CRDT	Ref MT1 MT2	Session	Contact	Study

INF	Course		CRDT	Rei	Session	Contact	Study
1	1001398	Instrumental Organic Analysis [en]	3.0		A:2	30.0	75
		Sven Mangelinckx Department of Green Chemistry and Technolog	IУ				
2	1002754	Environmental Chemistry: Organic Polluents [nl]	3.0		A:1	30.0	90
		Christophe Walgraeve Department of Green Chemistry and Techn	ology				
3	1002750	Isotopes in Biosciences [en]	5.0		A:1	50.0	150
		Pascal Boeckx Department of Green Chemistry and Technology					
4	1002670	Biochemical and Functional Analysis of Foods [nl]	5.0		A:1	50.0	150
		Bruno De Meulenaer Department of Food Technology, Safety and	Health				
5	1002728	Chemical Food Safety [nl]	5.0		A:1(2021)	50.0	150
		Bruno De Meulenaer Department of Food Technology, Safety and	Health				
18.		0.4. Entreman example and Meneration					

IMCHEM12.2.4 Entrepreneurship and Management -

IMCHEMkeuzeondernemersch.

Nr	Course		CRDT Ref MT1 MT	2 Session	Contact	Study
1	1001967	Intellectual Property and Valorization [en] Benedikt Sas Department of Food Technology, Safety and Health	3.0	A:2	30.0	90
2	1001949	Entrepreneurship [nl] Maikel Pellens Department of Marketing, Innovation and Organisati	3.0 on	A:2	30.0	75
3	E076460	Dare to Venture [en] Johan Verrue Department of Marketing, Innovation and Organisatio	4.0 n	A:2	30.0	120
4	E076471	Dare to Start [en] Frank Gielen Department of Information Technology	3.0	A:2	36.0	90
5	C000833	Project Management [nl] Mario Vanhoucke Department of Business Informatics and Operatic	4.0 ons Management	A:2	45.0	120
6	F000710	Supply Chain Management [en] Tarik Aouam Department of Business Informatics and Operations M	6.0 Ianagement	A:2	45.0	180
7	E076930	Financial and Cost Price Reporting in Companies [nl] Faculteit Economie en Bedrijfskunde, Patricia Everaert Department	6.0 of Accounting, Corporate Fi	A:1 inance and Taxati	45.0 ion	180

IMCHEM12.2.5 Skills and Attitudes - IMBIIR_VA

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

Nr	Course		CRDT	Ref	MT1 MT2	Session	Contact	Study
1	1002637	Internship [nl, en]	5.0	а		A:J	30.0	150
		Tom Desmet Department of Biotechnology						
2	1002638	International Internship [nl, en]	5.0	а		A:J	30.0	150
		Tom Desmet Department of Biotechnology						
3	1002639	Extended Internship [nl, en]	10.0	а		A:J	60.0	300
		Tom Desmet Department of Biotechnology						
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4	1002640	Extended International Internship [nl, en] Tom Desmet Department of Biotechnology	10.0	а	A:J	60.0	300
5	1001944	Bio-ethics [en] Heidi Mertes Department of Philosophy and moral sciences	3.0		A:1	30.0	75
6	C002668	Scientific Communication in English [en] Geert Jacobs Department of Linguistics	5.0		A:2	45.0	150
	1001784 CHEM12	Seminar [nl, en] Luc Tirry Department of Plants and Crops 2.2.6 Open Choice - IHAUGent&VUBkeuze	3.0		A:J	30.0	75
Subscribe to course units from courses offered at Ghent University and at the alliance partner VUB, including the <u>Ghent University</u> <u>Elective Courses</u> . 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.							

IMCHEM12.3 Master's Dissertation - IMCHEMmasterproef					30.0 credits			
Nr Course	CRDT	Ref	MT1	MT2	Session	Contact	Study	
1 I001480 Master's Dissertation [nl]	30.0		2	4	A:J	300.0	900	