

Cycle view of the study programme

B1 Or Th Pr Au Cr

Compulsory courses (B1 : 60Cr, B2 : 24Cr)
Periods 1 and 2
CHIM1.11 Analytical Chemistry : instrumental techniques

CHIM9246-2	<i>Chemical analysis : instrumental techniques</i> (english language) - Giorgia PURCARO - [5h SEM]	B1	Q1	21	28	[+]	6
	Corequisite : LANG2954-1 - Pratique de l'anglais de spécialité en chimie et bio-industries : part 1 (niveau B2+)						

CHIM1.12 Food preservation and safety

ALIM0001-1	<i>Food hygiene</i> - Georges DAUBE, Marianne SINDIC - [2h SEM]	B1	Q1	10	6	[+]	2
ALIM0015-1	<i>Food sanitary safety</i> - Marianne SINDIC - [2h SEM]	B1	Q1	16	6	[+]	2
ALIM0017-1	<i>Agro-food engineering procedures</i> - Sabine DANTHINE, Nicolas JACQUET	B1	Q1	24	24	-	4

CHIM1.13 Applied genoproteomics and immunology

CHIM0715-1	<i>Applied genoproteomics</i> (english language) - Patrick FICKERS, Laurence LINS, Sébastien MASSART, Luc WILLEMS - [6h AUTR]	B1	Q1	18	-	[+]	2
CHIM9321-1	<i>Immunology</i> - Benjamin G. DEWALS, Laurent GILLET, Alain VANDERPLASSCHEN, Hervé VANDERSCHUREN	B1	Q1	33	-	-	4

CHIM1.14 Biological chemistry and processes engineering

CHIM0718-1	<i>Biological chemistry and corresponding processes engineering, Introduction</i> (english language) - Aurore RICHEL - [2h FT]	B1	Q1	16	23	[+]	5
------------	--	----	----	----	----	-----	----------

CHIM1.15 Nutrition

ALIM0010-3	<i>Food, human nutrition and dietetics</i> (english language) - Jérôme BINDELLE	B1	Q1	18	-	-	2
	Corequisite : LANG2954-1 - Pratique de l'anglais de spécialité en chimie et bio-industries : part 1 (niveau B2+)						

Periods 3 and 4
CHIM1.30 Core curriculum Q2

MANA0004-1	<i>Portfolio (Master)</i> - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Marianne SINDIC - [24h AUTR]	B1	Q2	-	-	[+]	2
LANG2954-1	<i>Practice of specialized English in Chemistry and Bio-industries : part 1</i> (level B2+) - Sophie DEPOTERRE, Estelle MAYARD - Suppl : Fiona THEWISSEN - [36h AUTR]	B1	Q2	-	12	[+]	4
	Corequisite : CHIM9246-2 - Chemical analysis : instrumental techniques ALIM0010-3 - Food, human nutrition and dietetics CHIM9254-1 - Practice of natural product chemistry						

CHIM1.31 Microbial processes and interactions

CHIM0717-1	<i>Microbial processes and interactions</i> (english language) - Frank DELVIGNE, Patrick FICKERS, Philippe JACQUES, Marc ONGENA, JeanClaude TWIZERE	B1	Q2	54	36	-	9
------------	---	----	----	----	----	---	----------

CHIM1.32 Engineering and scaling conservation procedures

INGE0014-1	<i>Engineering and scaling conservation procedures</i> - Nicolas JACQUET, Paul MALUMBA KAMBA - [6h AUTR]	B1	Q2	6	12	[+]	2
INGE0002-1	<i>Refrigeration and drying</i> - Nicolas JACQUET, Paul MALUMBA KAMBA	B1	Q2	18	6	-	2

CHIM1.33 Food industry technologies

ALIM0012-1 *Technology of fats* - Sabine DANTHINE - [3h FT] B1 Q2 18 30 [+] 4

Period 3

CHIM1.34 Food engineering

ALIM0007-1 *Physical chemistry of formulations* - Christophe BLECKER B1 Q2 16 8 - 2

ALIM0005-1 *Food formulations engineering* - Christophe BLECKER B1 Q2 16 8 - 2

CHIM1.35 Practical chemistry of natural substances

CHIM9245-1 *Advanced chromatographic techniques (english language)* - Giorgia PURCARO B1 Q2 15 3 - 2

CHIM9254-1 *Practice of natural product chemistry (english language)* - Aurore RICHEL B1 Q2 3 35 - 4

Corequisite :

LANG2954-1 - Pratique de l'anglais de spécialité en chimie et bio-industries : part 1 (niveau B2+)

Period 4

CHIM2.31 Final work and internship

RTFE2008-1 *Thesis in chemistry and bio-industries* - N..., Marianne SINDIC B2 Q2 - - - 24

Optional courses (B2 : 36Cr)

Single focus (B2 : 30Cr)

Professional Focus (B2 : 30Cr)

Period 1

CHIM2.11 Microbial biotechnology - applications

CHIM0719-1 *Microbial biotechnology - applications (english language)* - Frank DELVIGNE, Patrick FICKERS, Philippe JACQUES, Marc ONGENA B2 Q1 10 44 - 6

CHIM2.12 Food Science

ALIM0006-1 *Food science* - Christophe BLECKER, Sabine DANTHINE B2 Q1 32 32 - 6

Period 2

CHIM2.21 Chemical contaminants analysis and risks of explosions

CHIM0720-1 *Analysis of chemical contaminants (english language)* - Giorgia PURCARO - [2h AUTR] B2 Q1 - 16 [+] 2

CHIM0721-1 *Entrepreneurship seminar* - Marianne SINDIC - [18h SEM] B2 Q1 - - [+] 2

CHIM0692-1 *Risks of using phytopharmaceutical products and biocides* - Jeroen MEERSMANS - [6h SEM] B2 Q1 12 - [+] 2

CHIM2.31 Final work and internship

Period 3

RSTG0002-1 *Internship and professional relations* - Catherine COLAUX, Thomas DOGOT, Patrick FICKERS, Marianne SINDIC, Didier VAN CAILLIE B2 TA 12 - - 8

Choose a language module from : (B2 : 4Cr)

Periods 3 and 4

CHIM 2.31 English (B2 : 4Cr)

LANG2955-2 *Practice of specialized English for chemistry and bioindustries : part 2 (level C1 - Presentation)* - Sophie DEPOTERRE, B2 Q2 - 12 [+] 4

MAYARD, Fiona THEWISSEN - Suppl : Fiona THEWISSEN - [36h AUTR]

Corequisite :

CHIM0719-1 - Microbial biotechnology - applications

CHIM0720-1 - Analysis of chemical contaminants

RTFE2008-1 - Travail de fin d'études en chimie et bio-industries

All year round

CHIM 2.32 Dutch (B2 : 4Cr)

LANG9914-1 *Dutch - intermediate* - Catherine PEETERS B2 TA 18 18 - 4

CHIM 2.33 Spanish (B2 : 4Cr)

LANG9915-1 *Spanish - beginners* - Valérie COYETTE B2 TA 18 18 - 4

Choose one module from : (B2 : 6Cr)

Period 2

CHIM2.22 Food supplements (B2 : 6Cr)

GBLX0058-1 *Complement of food formulations engineering and sensory analysis* - Christophe BLECKER B2 Q1 12 6 - 2

GBLX0059-2 *Logistics in food industry* - N..., Marianne SINDIC - [3h FT, 4h SEM] B2 Q1 9 6 [+] 2

GBLX0060-2 *Microbial ecology of water and wastewater (english language)* - Frank DELVIGNE - [2h SEM] B2 Q1 7 9 [+] 2

CHIM2.23 From gene to protein (B2 : 6Cr)

CHIM0716-1 *From gene to protein* - Patrick FICKERS, Laurence LINS, Sébastien MASSART, Martine SCHROYEN, Luc WILLEMS - [12h AUTR] B2 Q1 12 24 [+] 6

CHIM2.24 Extraction, purification, characterization and valuation of biosourced molecules (B2 : 6Cr)

CHIM0722-1 *Extraction, purification, characterization and valorization of biosourced molecules (english language)* - Christian DAMBLON, MarieLaure FAUCONNIER, JeanFrançois FOCANT, Loïc QUINTON, Aurore RICHEL B2 Q1 4 36 - 6

CHIM 2.25 Data mining & Machine learning (B2 : 6Cr)

STAT1213-1 *Multivariate analysis 1: data exploration and structuring* - Yves BROSTAUX B2 Q1 9 9 - 2

INFO8008-1 *Multivariate analysis 2: data mining and machine learning (english language)* - Yves BROSTAUX, Juan Antonio FERNANDEZ PIERNA, Hélène SOYEURT B2 Q1 12 26 - 4

Corequisite :

STAT1213-1 - Analyse multivariée 1 : exploration et structuration de données

Optional activities (B1 : 14Cr, B2 : 4Cr)

RSTG0011-1 *Additional internship* - N... B1 TA - - - 5

HULG9547-1 *French course for IN mobility students (S1)* - N... B1 Q1 - - - 3

HULG9548-1 *French course for IN mobility students (S2)* - N... B1 Q2 - - - 3

HULG9546-1 *Erasmus: integration weeks* - N... B1 Q1 - - - 3

INFO9013-1 *Multivariate analysis 3: Data mining et Machine Learning: advanced (english language)* - Yves BROSTAUX, David COLIGNON, Benoît MERCATORIS, Hélène SOYEURT B2 Q2 12 28 - 4

Prerequisite :

INFO8008-1 - Multivariate analysis 2 : data mining et machine learning

Additional ECTS Master in chemistry and bio-industries
Compulsory courses (B0 : 60Cr)
Common core courses

GEST3028-2	<i>Accounting and management</i> - <i>General accounting</i> - Thomas DOGOT, Philippe LEBAILLY - <i>Management, green accounting and business plan</i> - Thomas DOGOT, Philippe LEBAILLY	B0	Q1	12	12	-			4
GEST3773-1	<i>Management of quality</i> - Sébastien MASSART, Marianne SINDIC - [6h AUTR]	B0	Q1	18	-		[+]		2
STAT2004-1	<i>Applied statistics : First part</i> - Yves BROSTAUX	B0	Q1	12	12	-			2
STAT2005-1	<i>Applied statistic : Second part</i> - Yves BROSTAUX Corequisite : STAT2004-1 - Statistique appliquée : 1ère partie	B0	Q2	12	12	-			2
PSYC5897-3	<i>Team, organization and change</i> - Daniel FAULX, Véronique JANS, Tiber MANFREDINI - [44h SEM] Corequisite : GEST3028-2 - Comptabilité et gestion des entreprises GEST3773-1 - Gestion de la qualité MANA0003-1 - Portfolio (Bachelier)	B0	TA	4	-		[+]		2
MANA0003-1	<i>Portfolio (Bachelor)</i> - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Marianne SINDIC - [24h AUTR] Corequisite : PSYC5897-3 - Equipe, organisation & changement	B0	TA	-	-		[+]		2
RSTG0008-1	<i>Internship (Bachelor)</i> - Hélène SOYEURT - [18h AUTR] Corequisite : GEST3773-1 - Gestion de la qualité GEST3028-2 - Comptabilité et gestion des entreprises PSYC5897-3 - Equipe, organisation & changement	B0	TA	6	-		[+]		2
BIOL2044-1	<i>Plant physiology</i> - Patrick DU JARDIN	B0	Q1	27	9	-			3
BIOL2013-2	<i>General microbiology</i> - Patrick FICKERS, Philippe JACQUES	B0	Q1	16	8	-			2
ENVT2044-1	<i>General ecology</i> - Grégory MAHY, Arnaud MONTY - Suppl : Arnaud MONTY	B0	Q1	24	-	-			2
INFO2038-1	<i>Computer science and algorithmic</i> - Hélène SOYEURT	B0	Q1	2	22	-			2
MATH2016-1	<i>General mathematics and modelling of dynamics systems</i> - Jérôme BINDELLE, Catherine CHARLES, Frank DELVIGNE, Adeline FAYOLLE, Benoît MERCATORIS	B0	Q1	24	24	-			4
PHYS3036-1	<i>Environmental physics</i> - Bernard LONGDOZ	B0	Q1	18	18	-			3
LANG2966-2	<i>English language: level 3</i> - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Ivan DOSEN - [48h E-Lrng]	B0	TA	-	24		[+]		4
INGE0008-1	<i>Multidisciplinary experimental project</i> - Yves BROSTAUX, Pierre DELAPLACE, Sébastien MASSART, Benoît MERCATORIS, Arnaud MONTY, Bernard POCHE - [60h AUTR] Corequisite : STAT2005-1 - Statistique appliquée : 2ème partie STAT2004-1 - Statistique appliquée : 1ère partie GEST3773-1 - Gestion de la qualité BIOL2044-1 - Physiologie végétale ENVT2044-1 - Ecologie générale	B0	TA	6	6		[+]		6

Subject : Chemistry and bioindustry

BIAA0003-1	<i>Modelling physical and biological processes</i> - Frank DELVIGNE	B0	Q2	24	-	-	-	2
BIOL2015-3	<i>Molecular biology</i> - Luc WILLEMS Corequisite : BIOL2016-3 - Génétique générale	B0	Q2	24	-	-	-	2
BIOL2016-3	<i>General genetics</i> - Nicolas GENGLER, Ludivine LASSOIS Corequisite : BIOL2015-3 - Biologie moléculaire	B0	Q2	12	12	-	-	2
BIOL2019-1	<i>Theoretical chemistry and physics applied to biomolecules structural analysis</i> - Christian DAMBLON, JeanFrançois FOCANT, Loïc QUINTON	B0	Q2	24	24	-	-	4
CHIM9269-2	<i>Catalysis</i> - MarieLaure FAUCONNIER - [2h AUTR]	B0	Q2	6	12	[+]	-	2
CHIM9242-4	<i>Fundamentals of quantitative analytical chemistry</i> - Giorgia PURCARO	B0	Q2	16	32	-	-	4
ALIM0013-2	<i>Techniques of food preservation</i> - Christophe BLECKER Prerequisite : BIAA0002-1 - Technologie agricole et alimentaire	B0	Q2	24	-	-	-	2

Optional activity (B0 : 5Cr)

RSTG0012-1	<i>Additional internship</i>	B0	TA	-	-	-	-	5
------------	------------------------------	----	----	---	---	---	---	----------