

Block view of the study programme

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Block 1
Compulsory courses
Periods 1 and 2
CHIM1.11 Analytical Chemistry : instrumental techniques

 CHIM9246-2 *Chemical analysis : instrumental techniques* (english language) - Q1 21 28 [+] 6
 Giorgia PURCARO - [5h SEM]

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 *Food hygiene* - Georges DAUBE, Marianne SINDIC - [2h SEM] Q1 10 6 [+] 2

 ALIM0015-1 *Food sanitary safety* - Mohamed AYADI, Marianne SINDIC - [2h SEM] Q1 16 6 [+] 2

 ALIM0017-1 *Agro-food engineering procedures* - Sabine DANTHINE, Nicolas JACQUET Q1 24 24 - 4

CHIM1.13 Applied genoproteomics and immunology

 CHIM0715-1 *Applied genoproteomics* (english language) - Patrick FICKERS, Laurence LINS, Sébastien MASSART, Luc WILLEMS - Suppl : Magali DELEU - [6h AUTR] Q1 18 - [+] 2

 CHIM9321-1 *Immunology* - Benjamin G. DEWALS, Laurent GILLET, Alain VANDERPLASSCHEN, Hervé VANDERSCHUREN Q1 33 - - 4

CHIM1.14 Biological chemistry and processes engineering

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

CHIM1.15 Nutrition

 ALIM0010-3 *Food, human nutrition and dietetics* (english language) - Jérôme BINDELLE 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 *Portfolio (Master)* - Yves BECKERS, Hugues CLAESSENS, Gilles COLINET, Aurore DEGRÉ, Marianne SINDIC - [24h AUTR] Q2 - - [+] 2

 LANG2954-1 *Practice of specialized English in Chemistry and Bio-industries : part 1* (level B2+) - Sophie DEPOTERRE, Estelle MAYARD - Suppl : Annabel FOREST, Fiona THEWISSEN - [36h AUTR] TA - 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 *Microbial processes and interactions* (english language) - Frank DELVIGNE, Patrick FICKERS, Philippe JACQUES, Marc ONGENA, JeanClaude TWIZERE Q2 54 36 - 9

CHIM1.32 Engineering and scaling conservation procedures

 INGE0014-1 *Engineering and scaling conservation procedures* - Nicolas JACQUET, Paul MALUMBA KAMBA - [6h AUTR] Q2 6 12 [+] 2

 INGE0002-1 *Refrigeration and drying* - Nicolas JACQUET, Paul MALUMBA KAMBA Q2 18 6 - 2

CHIM1.33 Food industry technologies

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

Period 3

CHIM1.34 Food engineering

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

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

CHIM1.35 Practical chemistry of natural substances

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

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

Corequisite :

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

Optional activities

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

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

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

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

Block 2

Compulsory courses

Period 4

CHIM2.31 Final work and internship

RTFE2008-1 *Thesis in chemistry and bio-industries* Q2 - - - 24

Optional courses

Single focus

Professional Focus

Period 1

CHIM2.11 Microbial biotechnology - applications

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

CHIM2.12 Food Science

ALIM0006-1 *Food science* - Christophe BLECKER, Sabine DANTHINE 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] Q1 - 16 [+] 2

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

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

CHIM2.31 Final work and internship

Period 3

RSTG0002-1 *Internship and professional relations* - Catherine COLAUX, TA 12 - - 8

OGOT, Patrick FICKERS, Didier VAN CAILLIE

Choose a language module from :

Periods 3 and 4

CHIM 2.31 English

LANG2955-2 *Practice of specialized English for chemistry and bioindustries : part 2 (level C1 - Presentation)* - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Annabel FOREST, Fiona THEWISSEN - [36h AUTR]

Corequisite :

CHIM0720-1 - Analysis of chemical contaminants

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

CHIM0719-1 - Microbial biotechnology - applications

All year round

CHIM 2.32 Dutch

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

CHIM 2.33 Spanish

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

Choose one module from :

Period 2

CHIM2.22 Food supplements

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

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

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

CHIM2.23 From gene to protein

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

CHIM2.24 Extraction, purification, characterization and valuation of biosourced molecules

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

CHIM 2.25 Data mining & Machine learning

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

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

Corequisite :

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

Optional activity

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

Notice : INFO8001-1 prerequisite of the INFO9013-1 course

Bloc d'aménagement du programme de l'année

Additional ECTS Master in chemistry and bio-industries

Compulsory courses

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	Q1	12	12	-	4
GEST3773-1	<i>Management of quality</i> - Mohamed AYADI, Sébastien MASSART - [6h AUTR]	Q1	18	-	[+]	2
STAT2004-1	<i>Applied statistics : First part</i> - Yves BROSTAUX	Q1	12	12	-	2
STAT2005-1	<i>Applied statistic : Second part</i> - Yves BROSTAUX Corequisite : STAT2004-1 - Statistique appliquée : 1ère partie	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)	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	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	TA	6	-	[+]	2
BIOL2044-1	<i>Plant physiology</i> - Patrick DU JARDIN	Q1	27	9	-	3
BIOL2013-2	<i>General microbiology</i> - Patrick FICKERS, Philippe JACQUES	Q1	16	8	-	2
ENVT2044-1	<i>General ecology</i> - Grégory MAHY, Arnaud MONTY	Q1	24	-	-	2
INFO2038-1	<i>Computer science and algorithmic</i> - Hélène SOYEURT	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	Q1	24	24	-	4
PHYS3036-1	<i>Environmental physics</i> - Bernard LONGDOZ	Q1	18	18	-	3
LANG2966-2	<i>English language: level 3</i> - Sophie DEPOTERRE, Estelle MAYARD, Fiona THEWISSEN - Suppl : Ivan DOSEN, Annabel FOREST - [48h E-Lrng]	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	TA	6	6	[+]	6

Subject : Chemistry and bioindustry

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

Optional activity

RSTG0012-1	<i>Additional internship</i>	TA	-	-	-	5
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Possibility (via the student affairs office) to choose between 2 and 6 ECTS among the following courses, replacing the B2 elective courses:

GEOP0010-1	<i>Soil quality evaluation</i> - Gilles COLINET	Q2	14	13	-	3
ENVT2049-2	<i>Introduction to environmental assessment</i> - Angélique LÉONARD - [9h AUTR]	Q1	9	-	[+]	2
GERE0023-1	<i>Spatial analysis, organisation of grounds in the landscape and preservation of grounds</i> - Gilles COLINET, Aurore DEGRÉ, Jeroen MEERSMANS - [8h FT]	Q2	23	23	[+]	6
ENVT3050-1	<i>Quantification of ecosystem services</i> - Marc DUFRÈNE - [6h AUTR]	Q1	9	5	[+]	2
BIOD0001-3	<i>Biodiversity management</i> - Arnaud MONTY - [6h SEM]	Q1	18	-	[+]	2
VEGE0037-1	<i>Innovative system of plant production</i> - <i>Urban agriculture</i> - Haïssam JIJAKLI - <i>Developmental physiology applied to plant productions</i> - Pierre DELAPLACE - [6h FT] - <i>Physical parameters control of plant productions in controlled conditions</i> - Vincent LEEMANS	Q2		13 12	13 - [+]	6
VEGE0028-1	<i>Methods for managing plant health</i> - Frédéric FRANCIS, Olivier GUELTON, Eric HAUBRUGE, Haïssam JIJAKLI, Ludivine LASSOIS, Sébastien MASSART, François VERHEGGEN	Q2	42	15	-	6
VEGE0036-1	<i>Tropical agroecology</i> - <i>Introduction</i> - Ludivine LASSOIS - [20h FT] - <i>Depth notions</i> - Ludivine LASSOIS	Q2	- 16	- 21	[+] -	6