

Access conditions to the Master ([http://www.ulg.ac.be/cms/c\\_274707/masters-bioingenieur-4-grades](http://www.ulg.ac.be/cms/c_274707/masters-bioingenieur-4-grades))

## First Year

First semester

### Compulsory courses

#### CHIM1.10 Instrumental analysis (electrochemistry and spectrometry)

CHIM9246-2	<i>Instrumental analysis (electrochemistry and spectrometry) - Georges LOGNAY - [8h SEM]</i>	20	44	[+]	6
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Period 1

### Compulsory courses

#### CHIM1.11 Quality, nutrition and genetics

GENE0002-4	<i>Molecular genetics of microorganisms - Micheline VANDENBOL</i>	14	10	-	2
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GEST3015-1	<i>Quality management - Marianne SINDIC - [6h SEM]</i>	18	-	[+]	2
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ALIM0010-2	<i>Food, human nutrition and dietetics - André THEWIS</i>	24	-	-	2
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#### CHIM1.12 Management techniques

GEST3028-2	<i>Accounting and management - Thomas DOGOT, Philippe LEBAILLY</i>	24	24	-	4
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CHIM9247-1	<i>Industrial chemical processes engineering - Michel PAQUOT</i>	12	12	-	2
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Period 2

### Compulsory courses

#### CHIM1.22 Food sciences and technologies

BIAA0003-2	<i>Food and agro-food engineering, 2nd part - François BERA</i>	12	12	-	2
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ALIM0005-1	<i>Food Formulations Engineering - Christophe BLECKER</i>	16	8	-	2
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ALIM0007-1	<i>Physical chemistry of formulations - Christophe BLECKER</i>	18	6	-	2
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#### CHIM1.23 Chemistry of biological systems

BIOL2017-6	<i>Biological chemistry, 2nd part - Michel PAQUOT</i>	36	-	-	3
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BIOL2024-3	<i>Applied molecular biology - Franck DEQUIEDT</i>	24	12	-	3
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Second semester

Period 3

### Compulsory courses

#### CHIM1.31 Biological Process Engineering

GERE0007-1	<i>Digital electronics, first part - Bernard HEINESCH</i>	6	18	-	2
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BIOI0002-1	<i>Fermentation and extraction factories, 1st part - Philippe THONART</i>	24	24	-	4
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#### CHIM1.32 Group project

CHIM9245-1	<i>Chromatographic analysis of natural compounds - Georges LOGNAY - [6h SEM]</i>	18	-	[+]	2
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CHIM9254-1	<i>Practice chemistry of natural compounds - Aurore RICHEL</i>	4	44	-	4
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Period 4

### Compulsory courses

#### CHIM1.41 Placement

MANA0001-1	<i>Human resources and industrial relations management - Philippe LEPOIVRE - [8h AUTR]</i>	-	-	[+]	2
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RSTG0002-1	<i>Training - Marianne SINDIC</i>	-	-	-	4
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Period 5

### Compulsory courses

#### CHIM1.51 Technology of food industries

BIAA0003-3	<i>Food and agro-food engineering, 3rd part - François BERA</i>	2	22	-	2
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ALIM0008-3	<i>Technology of food industries - Sabine DANTHINE - [4h AUTR]</i>	24	20	[+]	4
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#### CHIM1.52 Microbial biochemistry and immunology

ALIM0001-1	<i>Food hygiene - Daniel PORTETELLE, Marianne SINDIC</i>	18	6	-	2
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ANIM0003-1	<i>Immunology and immunochemistry - Daniel PORTETELLE</i>	12	12	-	2
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ANIM0004-3	<i>Microbial biochemistry and physiology - Micheline VANDENBOL</i>	14	10	-	2
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## Second year

First semester

### Optional courses

Choose one option from the following :

#### "Agronomical sciences" courses programme (in GxABT)

##### Period 1

##### CHIM2.11 Biological Process Engineering

BIOI0002-2	<i>Fermentation and extraction factories, 2nd part</i> - Philippe THONART	24	24	-	4
CHIM9248-1	<i>Basic principles of wastewater treatments</i> - Frank DELVIGNE	24	-	-	2

##### CHIM2.12 Food Science

ALIM0006-1	<i>Food science</i> - Christophe BLECKER	30	30	-	5
GBLX0155-1	<i>Food chemistry</i> - Georges LOGNAY	-	12	-	1

##### Period 2

##### CHIM2.21 Current questions in chemistry and phytopharmacology

CHIM9250-1	<i>Advanced analytical chemistry</i> - Georges LOGNAY - [6h SEM]	-	18	[+]	2
CHIM0691-1	<i>Complement of organic chemistry</i> - MarieLaure FAUCONNIER - [6h AUTR]	-	18	[+]	2
CHIM0692-1	<i>Risks of using phytopharmaceutical products and biocides</i> - Bruno SCHIFFERS	24	-	-	2

##### CHIM2.22 Complementary studies in engineering techniques

ANIM0008-1	<i>Animal cell culture</i> - Daniel PORTETELLE - [4h FT]	12	8	[+]	2
GEST3067-1	<i>Topical seminars</i> - Marianne SINDIC - [20h AUTR]	4	-	[+]	2
BIOI0001-1	<i>Industrial microbiology</i> - Philippe THONART	24	-	-	2

Choose 3 courses from (CHIM223)

GERE0013-1	<i>Metrology</i> - MarieFrance DESTAIN	14	10	-	2
GBLX0059-2	<i>Logistics in food industry</i> - Marianne SINDIC - [16h AUTR]	8	-	[+]	2
GBLX0060-2	<i>Drinking water production</i> - JeanPaul BARTHELEMY, Frank DELVIGNE	14	6	-	2
BIOL2023-2	<i>Bio-informatics</i> - Laurence LINS	24	-	-	2
GBLX0054-1	<i>Processes of biorefinery and white biotechnology</i> - Michel PAQUOT - [6h SEM, 8h FT]	4	6	[+]	2
GBLX0058-1	<i>Complement of food formulations engineering and sensory analysis</i> - Christophe BLECKER - [4h SEM]	12	8	[+]	2
ANIM0009-2	<i>Immunobiology</i> - Daniel PORTETELLE - [4h AUTR]	12	4	[+]	2

#### Management courses programme (in HEC-ULg)

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	4
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	24	-	-	2
GEST3003-1	<i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN	16	16	-	3
GEST3004-1	<i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN	16	16	-	3
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	4
GEST3006-1	<i>Operations and supply chain management I</i> (english language) - Yasemin ARDA	16	16	-	3
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ	-	30	-	4
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	4

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	16	16	-	3
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	16	16	-	3
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	3

Second semester

Period 3

### Compulsory courses

#### CHIM2.31 Dissertation

RTFE0002-1	<i>Final dissertation (bioengineering)</i> - N...	-	-	-	27
LANG0907-2	<i>English language : scientific communication</i> - Sophie DEPOTERRE, Dany ETIENNE	-	36	-	3