

## Two-Year Master Program (120 ECTS)

### First Year

First semester

#### Compulsory courses

##### Analysis and Technology Module

PHAR0343-3 *Pharmaceutical technology and biopharmacy* - Brigitte EVRARD - [5h SEM] Q1 30 - [+] 4

PHAR0344-3 *Analysis of drugs (Part I)* - Marianne FILLET Q1 25 28 - 5

##### Module Pharmaco-toxicology

PHAC0341-2 *Special pharmacology (Part I)* - Vincent SEUTIN 25 - - 3

TOXI0341-2 *Clinical Toxicology and adverse drug events monitoring (Part I)* - Corinne CHARLIER - [13h SEM] Q1 25 - [+] 4

##### Module Biomedics

BIOC0340-1 *Clinical chemistry (1st part)* - Etienne CAVALIER - [13h SEM] 22 - [+] 4

NUTR0711-1 *Nutrition and dietetic elements* - Nicolas PAQUOT 10 - - 1

NUTR0712-1 *Nutrition and pathologies* - Nicolas PAQUOT 10 - - 1

BIOC9234-2 *Biochemistry and normal and pathological human physiology - digestive system* - Didier CATALDO 15 - - 2

BIOC9235-2 *Biochemistry and normal and pathological human physiology - urinary system* - Didier CATALDO 10 - - 1

##### Module Health and Society

SANT0340-1 *Principles in the followup of pharmaceutical care* - Christian ELSÉN 10 - - 1

PHAR2018-1 *Good medicinal pharmaceutical practices* - Patrick HERNÉ - [5h SEM] 10 - [+] 1

ECON0340-1 *Pharmacoeconomy* - Thierry VAN HEES Q1 10 - - 1

COMU0340-1 *Communication Strategy* - Alain CHASPIERRE, Pierre FIRKET, Muriel ROCOUR - [10h SEM] - - [+] 1

Second semester

#### Compulsory courses

##### Module Analysis and Technology

PHAR2020-1 *Integrated practical work* - Brigitte EVRARD, Marianne FILLET, Pierre FRANCOTTE, Michel FREDERICH, Philippe HUBERT, Géraldine PIEL, Bernard PIROTTE, AnneCatherine SERVAIS, Monique TITS, Eric ZIEMONS Q2 - 40 - 2

PHAR2219-1 *Integrated work 2* - Corinne CHARLIER, Brigitte EVRARD, Marianne FILLET, Pierre FRANCOTTE, Michel FREDERICH, Philippe HUBERT, Géraldine PIEL, Bernard PIROTTE, AnneCatherine SERVAIS, Monique TITS, Eric ZIEMONS - [30h LBOPS] Q2 - - [+] 1

PHAR0345-3 *Analysis of drugs (Part II)* - Marianne FILLET Q2 20 - - 4

PHAR0347-3 *Pharmaceutical Technology and Biopharmacy : experimental training* - Brigitte EVRARD Q2 - 84 - 4

##### Module Pharmaco-toxicology

PHAC0342-2 *Special pharmacology (Part II)* - Vincent SEUTIN 20 - - 3

TOXI0342-2 *Clinical Toxicology and adverse drug events monitoring (Part II)* - Corinne CHARLIER - [12h SEM] Q2 25 - [+] 4

##### Module Biomedics

BIOC0341-1 *Clinical chemistry (2nd part)* - Etienne CAVALIER - [12h SEM] 23 - [+] 4

##### Module Health and Society

LEGI0340-2 *Pharmaceutical legislation and deontology* - Patrick HERNÉ - [5h W. Cl. Pr.] 25 - [+] 4

PSYC0340-2 *Psychology of the patient* - JeanMarc TRIFFAUX - [12h SEM] Q2 - - [+] 1

##### Module Humans with Diseases / Illnesses

##### Courses by module

CAVS0340-2 *Multidisciplinary approach to human pathologies* - Didier CATALDO, Etienne CAVALIER, Corinne CHARLIER, Raphaël DENOZ, Brigitte EVRARD, Pierre FRANCOTTE, Michel FREDERICH, Philippe KOLH, Geneviève PHILIPPE, Géraldine PIEL, Bernard PIROTTE, AnneCatherine SERVAIS, Vincent SEUTIN, Monique TITS, Thierry VAN HEES - [30h PBL] Q2 - - [+] 4

**Two laboratory visits**

**An educational trip is organised during Carnival week**

**Second year**

Second semester

**Compulsory courses**

MTFE0351-1	<i>Medicinal placement and final thesis</i>								<b>28</b>
	- <i>Integration of knowledge</i> - COLLÉGIALITÉ	-	-	-					
	- <i>Learning file</i> - COLLÉGIALITÉ	-	-	-					
	- <i>Medicinal placement</i> - COLLÉGIALITÉ - [6mois Internship]	-	-	[+]					
APPR0160-2	<i>Workshop of complex problem solving</i> - COLLÉGIALITÉ, Geneviève PHILIPPE - [30h LBOPS]	Q2	-	-	[+]			[+]	<b>2</b>

*Notice* : Students must carry out or complete an official training programme of a legal length of six months. This programme involves the writing up of a programme workbook (TFE).

It could begin at the end of a successful BAC 3 and be carried out during the holidays which take place between the 1st and 2nd years of the Pharmaceutical Sciences Masters.

**Choose one focus from the following :**

**Research Focus**

First semester

**Optional courses**

Choose a placement from among :

MSTG0352-2	<i>Erasmus placement and complementary placement report</i> - COLLÉGIALITÉ - [450h Internship]	Q1	-	-	[+]				<b>18</b>
MSTG0353-2	<i>Cecodel placement and complementary placement report</i> - COLLÉGIALITÉ - [450h Internship]	Q1	-	-	[+]				<b>18</b>
MSTG0354-1	<i>Research placement in the French-speaking Belgium and complementary placement report</i> - COLLÉGIALITÉ - [450h Internship]		-	-	[+]				<b>18</b>

*Notice* : The training programme includes the writing of a report in English, which will then be publically defended.

Choose one of the following courses :

LANG0130-1	<i>Scientific English Practice (note-taking)</i> - Christine FILOT, Vincent SEUTIN	Q1	5	25	-				<b>6</b>
LANG1988-1	<i>Assessment of language skills during the internship</i> - COLLÉGIALITÉ		-	-	-				<b>6</b>

Choose one of the following courses :

STAT0420-1	<i>Biostatistics 2</i> - Nadia DARDENNE, AnneFrançoise DONNEAU		15	15	-				<b>6</b>
STAT1225-1	<i>Assessment of scientific knowledge during the internship</i> - COLLÉGIALITÉ		-	-	-				<b>6</b>

*Notice* : The choice of the optional course depends on the location of the internship for instance a course in English and in statistics will be offered to students with an internship within ULG. But this courses can be replaced by equivalence courses or by an assessment of their linguistic and scientific competence (as defined by the council of study) for students with an internship abroad (Erasmus or Cecodel).

**Professional focus in Pharmacy Practices, Advice and Follow-up**

First semester

**Compulsory courses specific to the specialisation in pharmacy practices, advice and follow-up**

MICR0350-1	<i>Management of anti-infective drugs (microbiology)</i> - Thierry VAN HEES	Q1	10	-	-				<b>2</b>
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INFO0351-1	<i>Pharmacy management</i> - Alain CHASPIERRE		10	-	-	2
PHAR0352-1	<i>Phytotherapy and food supplements containing herbs</i> - Monique TITS	Q1	10	-	-	2
SANTO350-1	<i>Heavy home care (including palliative care)</i> - Yvan HUON, Thierry VAN HEES	Q1	10	-	-	2
DERM0350-1	<i>Dermopharmacy</i> - N..., Arjen NIKKELS, Géraldine PIEL	Q1	10	-	-	2

#### Courses with an option specific to the area of specialisation in pharmacy practices, advice and follow-up

Choose one of the following courses :

MEDE0350-1	<i>Critical approach to homeopathy</i> - Monique TITS	Q1	10	-	-	2
VETE0350-1	<i>Veterinary Drug Delivery</i> - Brigitte EVRARD, Pascal GUSTIN, Bernard PIROTTE	Q1	10	-	-	2
GYNE0350-1	<i>Medicines, pregnancy and breast feeding</i> - Corinne CHARLIER	Q1	10	-	-	2
PHAR0717-1	<i>Special questions relating to infectiology (vaccines and anti-parasitics)</i> - MariePierre HAYETTE		10	-	-	2
NUTR0713-1	<i>Critical approach to dietary supplement</i> - Michel FREDERICH, Nicolas PAQUOT, Monique TITS - [5h SEM]	Q1	5	-	[+]	2
PHAR2021-1	<i>Medication and elderly people</i> - Jean PETERMANS, Audrey SAMALEASUAREZ, Thierry VAN HEES	Q1	10	-	-	2

**Students must choose a training programme and a complementary course specific to the chosen scientific discipline. This programme includes the writing of a report (in French) which will be publically defended.**

#### Pharmacognosy

MSTG0358-2	<i>Period of instruction in the laboratory of pharmacognosy</i> - Michel FREDERICH - [300h Internship]	Q1	-	-	[+]	15
PHAR0718-2	<i>Complement of pharmacognosy</i> - Personal research work - Michel FREDERICH - Drafting methodology - Geneviève PHILIPPE	Q1				3
			10	-	-	
			5	-	-	

#### Mycology

MSTG0350-2	<i>Internship: Mycology</i> - Gabriel CASTILLO CABELLO - [300h Internship]	Q1	-	-	[+]	15
BOTA0411-3	<i>Complement of mycology</i> - Personal research work - Gabriel CASTILLO CABELLO - Drafting methodology - Geneviève PHILIPPE		10	-	-	3
			5	-	-	

#### Clinical Toxicology

MSTG1351-2	<i>Training course : Clinical toxicology</i> - Corinne CHARLIER - [300h Internship]	Q1	-	-	[+]	15
TOXI0704-2	<i>Complement of clinical toxicology</i> - Personal research work - Corinne CHARLIER - Drafting methodology - Geneviève PHILIPPE		10	-	-	3
			5	-	-	

#### Pharmaceutical chemistry

MSTG0453-2	<i>Training : medicinal chemistry</i> - Bernard PIROTTE - [300h Internship]		-	-	[+]	15
CHIM0684-2	<i>Complement of pharmaceutical chemistry</i> - Personal research work - Bernard PIROTTE - Drafting methodology - Geneviève PHILIPPE		10	-	-	3
			5	-	-	

#### Clinical Pharmacy

MSTG0461-2	<i>Clinical pharmacy placements in hospitals</i> - Thierry VAN HEES - [300h Internship]		-	-	[+]	15
PHAR0719-2	<i>Complement of clinical pharmacy</i> - Personal research work - Thierry VAN HEES - Drafting methodology - Geneviève PHILIPPE		10	-	-	3
			5	-	-	

#### Clinical chemistry

MSTG0355-1	<i>Training course : Medical chemistry - Etienne CAVALIER - [300h Internship]</i>							[+]	15
CHIM0685-2	<i>Complement of clinical chemistry</i>								3
	- <i>Personal research work - Etienne CAVALIER</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Pharmaceutical Technology</b>									
MSTG2350-2	<i>Training course : Pharmaceutical technology - Brigitte EVRARD - [300h Internship]</i>		Q1	-	-			[+]	15
PHAR1354-2	<i>Complement of pharmaceutical technology</i>								3
	- <i>Personal research work - Brigitte EVRARD</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Microbiology</b>									
MSTG1352-2	<i>Internship : Microbiology - MariePierre HAYETTE, Pierrette MELIN - [300h Internship]</i>							[+]	15
MICR0718-2	<i>Complement of microbiology</i>								3
	- <i>Personal research work - MariePierre HAYETTE, Pierrette MELIN</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Legislation and pharmaceutical deontology</b>									
MSTG2144-1	<i>Placement : Legislation and Pharmaceutical Ethics - Patrick HERNÉ - [300h Internship]</i>							[+]	15
DEON0712-2	<i>Complement of legislation and pharmaceutical deontology</i>								3
	- <i>Personal research work - Patrick HERNÉ</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Hospital Pharmacy</b>									
MSTG2045-2	<i>Placement : Hospital pharmacy - Thierry VAN HEES - [300h Internship]</i>							[+]	15
PHAR2022-2	<i>Complement of hospital practice</i>								3
	- <i>Personal research work - Thierry VAN HEES</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>French scientific society of pharmacists (SSPF)</b>									
MSTG2046-2	<i>Placement : SSPF - Patrick HERNÉ - [300h Internship]</i>							[+]	15
PHAR2023-2	<i>Complement of medicinal practice</i>								3
	- <i>Personal research work - Patrick HERNÉ</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Belgian Pharmaceutical Association</b>									
MSTG2047-2	<i>Placement : APB - Patrick HERNÉ - [300h Internship]</i>							[+]	15
PHAR2023-2	<i>Complement of medicinal practice</i>								3
	- <i>Personal research work - Patrick HERNÉ</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Analysis of Medicines</b>									
MSTG2352-2	<i>Training course : Analysis of drugs - Marianne FILLET - [300h Internship]</i>		Q1	-	-			[+]	15
PHAR1355-2	<i>Complement of drug analysis</i>		Q1						3
	- <i>Personal research work - Marianne FILLET</i>	10	-	-					
	- <i>Drafting methodology - Geneviève PHILIPPE</i>	5	-	-					
<b>Analytical Chemistry</b>									
MSTG1353-2	<i>Training course : Analytical chemistry - Philippe HUBERT - [300h Internship]</i>		Q1	-	-			[+]	15
CHIM0358-2	<i>Complement of analytical chemistry</i>								3
	- <i>Personal research work - Philippe HUBERT</i>	10	-	-					

- *Drafting methodology* - Geneviève PHILIPPE 5 - -

**Nutrition**

MSTG1760-1 *Placement : Nutrition* - Nicolas PAQUOT - [300h Internship] - - - [+] **15**  
 NUTR0719-2 *Complement of nutrition* - - - - **3**  
 - *Personal research work* - Nicolas PAQUOT 10 - -  
 - *Drafting methodology* - Geneviève PHILIPPE 5 - -

**Professional Focus in Creation and Development of Medicines - Bio-analysis**

First semester

**Compulsory courses**

PHAR0356-1 *Industrial Pharmaceutics including BPF* - Brigitte EVRARD, Philippe HUBERT Q1 10 - - **2**  
 PHAR0354-1 *Structural determination of organic compounds from spectra* - Pascal DE TULLIO, Michel FREDERICH Q1 10 - - **2**  
 BIOL2025-1 *Medical and pharmaceutical applications in molecular biology* - Alain CHARLOT 10 - - **2**  
 PHAR0355-1 *Complement of drug analysis in complex media* - Patrice CHIAP, Marianne FILLET Q1 10 - - **2**  
 CHIM0350-1 *Strategies and tools used in the design and the development of new drugs* - Brigitte EVRARD, Michel FREDERICH, Bernard PIROTTE Q1 10 - - **2**

**Optional courses**

Choose one of the following courses :

PHAR0357-1 *Biomarkers and proteomics : analytical aspects* - Marianne FILLET, Philippe HUBERT Q1 10 - - **2**  
 TOXI0350-1 *Experimental toxicology (in vitro tests)* - Corinne CHARLIER Q1 10 - - **2**  
 SBIM0437-1 *Biosafety* - Willy ZORZI 5 5 - - **2**  
 PHAR2016-1 *Virology and antiviral theory* - Jacques PIETTE Q1 10 - - **2**  
 PHAR2017-1 *Complement of bacteriology* - Bernard JORIS 10 - - **2**

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**Pharmacognosy**

MSTG0358-2 *Period of instruction in the laboratory of pharmacognosy* - Michel FREDERICH - [300h Internship] Q1 - - - [+] **15**  
 PHAR0718-2 *Complement of pharmacognosy* Q1 - - **3**  
 - *Personal research work* - Michel FREDERICH 10 - -  
 - *Drafting methodology* - Geneviève PHILIPPE 5 - -

**Pharmacology**

MSTG3350-2 *Training course : Pharmacology* - Vincent SEUTIN - [300h Internship] - - - [+] **15**  
 PHAC0431-2 *Complement of pharmacology* - - - - **3**  
 - *Personal research work* - Vincent SEUTIN 10 - -  
 - *Drafting methodology* - Geneviève PHILIPPE 5 - -

**Clinical Toxicology**

MSTG1351-2 *Training course : Clinical toxicology* - Corinne CHARLIER - [300h Internship] Q1 - - - [+] **15**  
 TOXI0704-2 *Complement of clinical toxicology* - - - - **3**  
 - *Personal research work* - Corinne CHARLIER 10 - -  
 - *Drafting methodology* - Geneviève PHILIPPE 5 - -

**Pharmaceutical chemistry**

MSTG0453-2 *Training : medicinal chemistry* - Bernard PIROTTE - [300h Internship] - - - [+] **15**

