

**At Bruxelles Woluwe - 120 credits - 2 years - Day schedule - In French**

Dissertation/Graduation Project : **YES** - Internship : **YES**

Activities in English: **NO** - Activities in other languages : **NO**

Activities on other sites : **NO**

Main study domain : **Sciences biomédicales et pharmaceutiques**

Organized by: **Faculty of Pharmacy and Biomedical Sciences (FASB)**

## FARM2M - Introduction

### Introduction

---



5e. Select an appropriate response and apply a solution in their professional practice, in particular to design and validate an experimental protocol.

6. Sense of responsibility: act in an ethical and responsible manner

6a. Incorporate a knowledge base of ethics, legislation, deontology and pharmaco-economics.

6b. Conduct themselves as key and responsible actors, with public health issues a priority concern.

6c. Identify the competent professional to whom a request outside the scope of their activities should be transferred.




7. Quality: evaluate, self-assess and update their knowledge and improve their practice

7a. Develop a self-assessment approach to define their training needs in order to respond to complex situations.

7b. Identify and utilise individual and collective lifelong learning tools in an independent, critical and robust manner.

7c. Update and expand their knowledge base and skills independently to ensure that their knowledge and practices are constantly improved.

7d. Evaluate the work of colleagues to contribute to the improvement of knowledge and practices.

				Year	
				1	2
○ WFARM2117	Analyse et contrôle de qualité des médicaments	Giulio Muccioli (coord.) Quentin Spillier	FR [q1] [30h] [3 Credits]  > English-friendly	x	
○ WFARM2118	Chimie médicinale	Raphaël Frédéric Didier Lambert Giulio Muccioli (coord.)	FR [q2] [30h] [3 Credits]  > English-friendly	x	
○ WFARM2139	Pharmacocinetic, genomics and toxicology	Laure Bindels (coord.) Laure Elens Vincent Haufroid	FR [q1] [37.5h] [4 Credits]  > English-friendly	x	
○ WFARM2149	Pharmaceutical approach in nutrition	Nathalie Delzenne	FR		

## LIST OF FOCUSES

---

- > [Research Focus](#) [ en-prog-2024-farm2m-wfarm200a ]  
> [Professional Focus](#) [ en-prog-2024-farm2m-wfarm201s ]

## RESEARCH FOCUS [30.0]

---

- Mandatory
- ⊗ Optional
- △ Not offered in 2024-2025
- ⊖ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

---

[Click on the course title to see detailed informations \(objectives, methods, evaluation...\)](#)

Year

1 2

---

## o Content:

○ WFARM2135	Seminary and practical exercises integred of pharmaceutical sciences	Anne des Rieux Laure Elens Raphaël Frédéric Giulio Muccioli (coord.)	EB [q1+q2] [0h+160h] [9 Credits] 🌐	X
○ WFARM2196	Rational therapeutic choices (Introduction to evidence-based medicine and pharmacoconomy)	Nathalie Dujardin Séverine Henrard Anne Spinewine (coord.)	EB [q1] [30h+10h] [4 Credits] 🌐	X
○ WFARM2134	Gestion des situations aigües	Pierre Bulpa (coord.) Maximilien Gourdin Patrick Honoré Henri Thonon	EB [q2] [15h] [2 Credits] 🌐	X
○ WFARM2235	PRACTICAL TRAINING IN PHARMACEUTICAL TECHNOLOGY 🟡	Anne des Rieux	EB [q1] [0h+120h] [5 Credits] 🌐	X
○ WFARM2211	Integrated pharmacotherapy seminars 🟡	Olivia Dalleur Chantal Dessy Nathalie Dujardin Emmanuel Hermans Muriel Rocour Françoise Van Bambeke (coord.)	EB [q1+q2] [0h+22.5h] [2 Credits] 🌐 > English-friendly	X
○ WFARM2259	Séminaire d'intégration pharmaceutique (finalité spécialisée) 🟡	Mireille Al Houayek Patrice Cani Olivia Dalleur Nathalie Delzenne Anne des Rieux Olivier Feron Bernard Gallez Emmanuel Hermans (coord.) Joseph Lorent Giulio Muccioli Rita Vanbever	EB [q2] [40h] [8 Credits] 🌐 > English-friendly	X

**OPTIONS [16.0]**

- > Option délivrance et suivi pharmaceutique [ en-prog-2024-farm2m-wfarm202o ]
- > Option innovation et conception du médicament [ en-prog-2024-farm2m-wfarm203o ]
- > Option production, contrôle et réglementation





**OPTION INNOVATION ET CONCEPTION DU MÉDICAMENT [16.0]**

En envisageant les premiers stades de développement du médicament, depuis sa découverte jusqu'aux étapes de recherche préclinique, cette option met l'accent sur la conception des futurs nouveaux médicaments dans les laboratoires de recherche.

- Mandatory
- ⊗ Optional
- △ Not offered in 2024-2025
- ⊖ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- 🇫🇷 Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year

1 2

**o Content:****o Cours obligatoires (10 credits)**

○ WFARM2128	Processus de découverte, de développement et de mise sur le marché du médicament	Mireille Al Houayek (compensates) Laure Bindels Raphaël Frédéric Séverine Henrard Philippe Jacqmin Didier Lambert Françoise Van Bambeke (coord.)	FR [q2] [30h+15h] [3 Credits] 🌐 > English-friendly	X
○ WFARM2515	Pharmacologie moléculaire	Mireille Al Houayek Emmanuel Hermans (coord.) Joseph Lorent Pierre Sonveaux	FR [q1] [22.5h] [3 Credits] 🌐 > English-friendly	X
○ WFARM2210	Contact en milieu professionnel (stage 1 mois)		FR [q1] [] [4 Credits] 🌐	X

**o Cours au choix (6 credits)**

L'étudiant choisit 2 cours dans la liste suivante. Avec l'accord du conseiller aux études, un autre cours pourrait être choisi mais la compatibilité horaire avec l'ensemble du programme pourrait ne pas être assurée.

⊗ WFARM2501	Chimie pharmaceutique avancée et drug design	Raphaël Frédéric Didier Lambert Giulio Muccioli (coord.)	FR [q2] [22.5h] [3 Credits] 🌐 > English-friendly	X
⊗ WFARM2508				

**OPTION PRODUCTION, CONTRÔLE ET RÉGLEMENTATION [16.0]**

Cette option regroupe les cours en rapport immédiat avec les activités spécifiques des pharmaciens dans l'industrie.

**OPTION BIOPHARMACIE ET PHARMACOTOXICOLOGIE [16.0]**

Au travers d'une formation complémentaire en pharmacocinétique et toxicologie, cette option vise à mieux connaître le destin du médicament dans l'organisme, ainsi qu'à mieux en comprendre l'éventuelle toxicité.

- Mandatory
- ✘ Optional
- △ Not offered in 2024-2025
- ⊖ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year

1 2

**o Content:****o Cours obligatoires (10 credits)**

● WFARM2180	Organotoxicity : molecular, cellular and functional aspects	Olivier Feron (coord.) Philippe Lysy Xavier Wittebole	FR [q2] [30h+15h] [3 Credits] 🌐 > English-friendly	X
● WFARM2244	Biologie clinique et monitoring thérapeutique	Laure Elens (coord.) Vincent Haufroid	FR [q1] [22.5h] [3 Credits] 🌐 > English-friendly	X
● WFARM2210	Contact en milieu professionnel (stage 1 mois)		FR [q1] [] [4 Credits] 🌐	X



## Supplementary classes

**To access this Master, students must have a good command of certain subjects. If this is not the case, in the first annual block of their Masters programme, students must take supplementary classes chosen by the faculty to satisfy course prerequisites.**

- Mandatory
- ⊗ Optional
- △ Not offered in 2024-2025
- ⊖ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

### ○ Supplementary classes

Maximum 60 credit(s)

○ WFARM1213	<a href="#">Human physiology and basics of physiopathology</a>	Olivier Feron (coord.) Emmanuel Hermans Jean-Christophe Jonas (compensates) Mandy Grootaert	FR [q2] [60h] [6 Credits] 🌐 > English-friendly
-------------	--	---	---

## Course prerequisites

---

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified in the **detailed programme**: their title is followed by a yellow square.

### Prerequisites and student's annual programme

As the prerequisite is for CU registration purposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.
- transform a prerequisite into a corequisite if the student is in the final year of a degree course.

For more information, please consult the [Academic Regulations and Procedures](#).

### # Prerequisites list

- WFARM2211** "Séminaire de pharmacothérapie intégrée" has prerequisite(s) WFARM2111 ET WFARM2114 ET WFARM2116
- WFARM2111 - [Integrated pharmacotherapy](#)
  - WFARM2114 - [Pharmacologie spéciale et éléments de pharmacothérapie 1re partie](#)
  - WFARM2116 - [Pharmacologie spéciale et éléments de pharmacothérapie 2e partie](#)
- WFARM2235** "Travaux pratiques de pharmacie galénique" has prerequisite(s) WFARM2117 ET WFARM2156 ET WFARM2157
- WFARM2117 - [Analyse et contrôle de qualité des médicaments](#)
  - WFARM2156 - [Pharmacie galénique 1re partie](#)
  - WFARM2157 - [Pharmacie galénique 2e partie](#)
- WFARM2249** "Séminaire d'intégration pharmaceutique (finalité approfondie)" has prerequisite(s) WFARM2117 ET WFARM2118 ET WFARM2156 ET WFARM2157 ET WFARM2114 ET WFARM2116 ET WFARM2111
- WFARM2117 - [Analyse et contrôle de qualité des médicaments](#)
  - WFARM2118 - [Chimie médicinale](#)
  - WFARM2156 - [Pharmacie galénique 1re partie](#)
  - WFARM2157 - [Pharmacie galénique 2e partie](#)
  - WFARM2114 - [Pharmacologie spéciale et éléments de pharmacothérapie 1re partie](#)
  - WFARM2116 - [Pharmacologie spéciale et éléments de pharmacothérapie 2e partie](#)
  - WFARM2111 - [Integrated pharmacotherapy](#)
- WFARM2256** "Soins pharmaceutiques en officine et stage" has prerequisite(s) WFARM2111 ET WFARM2114 ET WFARM2116 ET WFARM2156 ET WFARM2157
- WFARM2111 - [Integrated pharmacotherapy](#)
  - WFARM2114 - [Pharmacologie spéciale et éléments de pharmacothérapie 1re partie](#)
  - WFARM2116 - [Pharmacologie spéciale et éléments de pharmacothérapie 2e partie](#)
  - WFARM2156 - [Pharmacie galénique 1re partie](#)
  - WFARM2157 - [Pharmacie galénique 2e partie](#)
- WFARM2259** "Séminaire d'intégration pharmaceutique (finalité spécialisée)" has prerequisite(s) WFARM2117 ET WFARM2118 ET WFARM2156 ET WFARM2157 ET WFARM2114 ET WFARM2116 ET WFARM2111
- WFARM2117 - [Analyse et contrôle de qualité des médicaments](#)
  - WFARM2118 - [Chimie médicinale](#)
  - WFARM2156 - [Pharmacie galénique 1re partie](#)
  - WFARM2157 - [Pharmacie galénique 2e partie](#)
  - WFARM2114 - [Pharmacologie spéciale et éléments de pharmacothérapie 1re partie](#)
  - WFARM2116 - [Pharmacologie spéciale et éléments de pharmacothérapie 2e partie](#)
  - WFARM2111 - [Integrated pharmacotherapy](#)
- WFARM2275** "Exercice de communication scientifique" has prerequisite(s) WFARM2171 ET WFARM2175 ET WFARM2176
- WFARM2171 - [Travail expérimental de recherche en sciences pharmaceutiques \(1re partie\)](#)
  - WFARM2175 - [Etude critique d'un article de recherche en sciences pharmaceutiques](#)
  - WFARM2176 - [Présentation d'un travail de recherche en sciences pharmaceutiques](#)
- WFARM2286** "Démarche expérimentalpharmt.c15Q8e)(e)

## FARM2M - Information

### Access Requirements

---

*Master course admission requirements are defined by the French Community of Belgium Decree of 7 November 2013 defining the higher education landscape and the academic organisation of courses.*

*General and specific admission requirements for this programme must be satisfied at the time of enrolling at the university.*





## Specific professional rules

---

These studies lead to a professional title subject to specific rules or restrictions on professional accreditation or establishment.

You will find the necessary legal information by [clicking here](#).

## Teaching method

---

The teaching provided on the Master in Pharmacy programme is based on a variety of teaching methods enabling an integrated approach to the theory and practical aspects of the different disciplines relating to the professions of pharmacist and pharmaceutical researcher.

The theory classes are aimed at developing a specialised knowledge base in pharmacy using simple and complex practical examples of pharmaceutical problems. A number of compulsory and elective theory classes are also associated with a cross-functional activity integrating different disciplines by means of practical work in laboratories, seminars and case studies, during which the students become actively involved in their own learning.

Several teaching units invite the students to learn about pharmacy through individual or group work. The aim of such work is to develop skills in self-learning, summarising and communication. Another objective is to produce a thesis in which the students address, in a detailed and integrated manner, an original question related to one or more pharmaceutical fields, under the guidance of an expert in this area.

In the Research focus, the Master in Pharmacy teaching enables the students to work in a research laboratory or clinical pharmacy service, where they can discover the world of research through individual work based on experimentation and data analysis.

The training also includes a 6-month work placement in a dispensary, enabling the students to learn about the profession on their own and under the guidance of a pharmacist. An orientation placement, also compulsory, enables them to discover the other facets of the pharmacist's profession in society.

The theory-based and practical training involves pharmacy experts throughout the academic programme. This specialist supervision ensures a balance between the expected learning outcomes and current expectations of society in the field of pharmacy.

## Evaluation

---

***The evaluation methods comply with the [regulations concerning studies and exams](#). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".***

Each course is subject to one or more evaluations, in the form of written and/or oral exams, organised in two main sessions: one in January and the other in June. The September session is a re-sit opportunity.

The specific details of the exam are communicated to the students at the start of each course. These evaluations are intended to assess the learning outcomes defined in the course objectives. With regard to the practical elements of the training (practicals, seminars and projects), the evaluation is ongoing and may include a final assessment. It places the emphasis on expertise in the fields of health science and pharmacy and on the students' ability to tackle a pharmaceutical problem using a scientific approach.

The evaluation of certain seminars and work is aimed at appraising the incorporation of the different pharmacy disciplines by the students. Finally, the Master's programme culminates in an integrated interdisciplinary oral exam in which the student has to analyse a prescription for one or more medications from various pharmaceutical perspectives (in particular: chemistry, galenics and pharmacology).

To obtain the average, the marks obtained for the teaching units are weighted by their respective credits.

## Mobility and/or Internationalisation outlook

---

Apart from studying for a whole year at another university (mainly Erasmus scheme) the option courses (all or some) or certain placements and/or research seminars may be replaced by a placement abroad (Erasmus scheme or similar).

The course on Health Economics and Pharmacoeconomics (2 credits) is a new course developed in partnership with KULeuven and is to be held partly at both sites.

The different option courses are accessible to bachelors in pharmacy from other Belgian or foreign as well as bachelors from other schools and faculties at UCL or other Belgian or foreign universities, subject to the agreement from the admission committee ([delphine.delhaye@uclouvain.be](mailto:delphine.delhaye@uclouvain.be)). The whole, or part of, the study programme for the Master in Pharmacy is open to foreign students under the Erasmus exchange scheme or other equivalents, subject to the agreement of the Erasmus coordinator ([veronique.preat@uclouvain.be](mailto:veronique.preat@uclouvain.be)).

The Pharmacy School has ERASMUS agreements with the following universities :

Germany (Saarbrücken) ; Spain (Alcala de Henares, Madrid, Santiago de Compostela) ; France (Lille and Lyon) ; Greece (Patra) ; Italy (Bologna, Parma, Pisa) ; Netherlands (Utrecht) ; Portugal (Coimbra) ; United Kingdom (Bath).

## Possible trainings at the end of the programme

---

Graduates of the Master in Pharmaceutical Sciences have access to the following training courses subject to any special conditions indicated therein (see these programs):

Advanced Masters :

Advanced Master in Clinical Biology

Advanced Master in Industrial Pharmacy

Advanced Master in Hospital Pharmacy

Doctoral programmes :

Doctorate in pharmacy

