

# Advanced Master in Industrial Pharmacy

At Bruxelles Woluwe - 60 credits - 1 year - Day schedule - In French

Dissertation/Graduation Project : YES - Internship : YES Activities in English: YES - 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)
Programme acronym: FARI2MC - Francophone Certification Framework: 7

## **Table of contents**

ntroduction	2
Гeaching profile	3
Learning outcomes	3
Programme	3
Detailed programme by subject	
The programme's courses and learning outcomes	5
nformation	6
Access Requirements	6
Teaching method	7
Evaluation	
Contacts	7

# **FARI2MC - Introduction**

# Introduction

## FARI2MC - Teaching profile

## **Learning outcomes**

The Advanced Master degree in Industrial Pharmacy gives the student all theoretical and practical knowledge to work in the following fields: production, drug quality control and analysis and in the drug approval process, marketing and pharmacovigilance.

This programme comprises theory and practical work in a field chosen by the student (pharmaceutical industry or other bodies or laboratories where the skills of a pharmacist are needed).

The Advanced Master degree in Industrial Pharmacy is the only way to obtain the title of Qualified person (law of the 14th December 2006 regarding drugs used in humans and animals, article 84). For the pharmacist or owners of a degree endowed with equivalent skills, to obtain this title recognized by the Ministry of Health, the Advanced Master degree must be completed by a 6 months experience in one or more pharmaceutical firm(s) owner of an authorization of drug production according to the rules comprised in the Royal decree of the 14th August 1989.

On successful completion of this programme, each student is able to:

- 1 To master and integrate relevant knowledge in all questions regarding the pharmaceutical industry
- 1.a to tackle, analyze and work with organic, inorganic, natural, biotechnologically produced substances and radiopharmaceuticals.
- 1.b to assess pharmacological data and pharmacokinetics related to biologically active compounds.
- 1.c to engineer a pharmaceutical form with the required physic-chemical characteristics.
- 1.d to collaborate in the realization of a clinical study.
- 1.e to understand intellectual property.
- 1.h to release a batch for the drug market.
- 1.i to solve problems linked to drug production.
- 2 Scientific approach
- 2.a To integrate and analyze with criticism different scientific approaches to the design, development, production and marketing of the product.
- 2.b To be able to plan scientific experiments, to draw statistically valid conclusions and, if necessary, to modify the plan to get the best results.
- 2.c Intégrer les lois et règlements en vigueur afin de fabriquer, distribuer et commercialiser les médicaments sur les marchés, belge, européen et étranger.
- 3 To communicate professionally and adapt the message to different people
- 3.a to be able to present scientific results.
- 3.b to communicate in English, the main language in scientific communication in the world.
- 3.c to deliver a message or clear and specific guidelines to be implemented within the framework of scientific and administrative work.
- 4 Sense of responsibility
- 4.a To assume responsibilities in accordance with ethics, laws and best practice.
- 4.b To stay abreast of new rules and laws issued by various national and international bodies in charge of health.
- 4.c To be able to manage and lead a group of people, to assign them tasks in the context of scientific and administrative work and checking if the guidelines or procedures have been properly applied.
- 5 To evaluate, to assess themselves, to update knowledge and continually improve their practice
- 5.a by training.
- 5.b by attending scientific conferences.

### **FARI2MC Programme**

### **Detailed programme by subject**

## **CORE COURSES [60.0]**

- O Mandatory
- ☼ Optional
- △ Not offered in 2022-2023
- Not offered in 2022-2023 but offered the following year
- $\ensuremath{\oplus}$  Offered in 2022-2023 but not the following year
- $\Delta \oplus$  Not offered in 2022-2023 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...)

## o Mandatory modules (45 credits)

L'ensemble des informations sur les enseignements est visible en cliquant les intitulés des cours.

O WFARI2100	Active molecules	Joëlle Leclercq	FR [q1+q2] [35h] [4 Credits] 🕮
O WFARI2101	Aspects cliniques	François-Xavier Mathy	[q1] [45h] [5 Credits] 🛞
O WFARI2102	Assurance de qualité et management pharmaceutique	Xavier Marcelis (coord.) Thierry Pronce	[q1+q2] [65.5h] [7 Credits]
O WFARI2103	Technologie pharmaceutique		[q1+q2] [49h] [5 Credits] 🕮
O WFARI2104	Analyse des médicaments	Laure Elens	FR [q1+q2] [54h] [6 Credits] 🕮
• WFARI2105	Affaires réglementaires et environnement médico-social	Catherine Druez	[q1] [72h] [8 Credits] 🛞
• WFARI2106	Visites et séminaires organisés dans les industries pharmaceutiques	Joëlle Leclercq	[1] [q1+q2] [75h] [3 Credits] ®
O WFARI2110	Biotechnology	Rita Vanbever	FR [q1+q2] [59h] [7 Credits] ∰

o Travail de fin d'études réalisé dans le cadre d'un stage dans l'industrie pharmaceutique (15 credits)

# The programme's courses and learning outcomes

For each UCLouvain training programme, a reference framework of learning outcomes specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

#### **FARI2MC - Information**

## **Access Requirements**

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail. Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

#### **SUMMARY**

- General access requirements
- Specific access requirements

# **General access requirements**

Translated from https://www.gallilex.cfwb.be/fr/leg\_res\_01.php?ncda=39681&referant=l02

Art. 112. § 1. In accordance with the general requirements established by the academic authorities, students who have:

- 1. a master's degree;
- 2. an academic degree similar to the one mentioned in the preceding paragraph awarded by a higher education institution in the Flemish Community or the German-speaking Community, or by the Royal Military Academy, by virtue of a decision of the academic authorities and in accordance with any additional requirements they may establish;
- 3. a foreign academic degree recognised as equivalent to those mentioned in paragraphs 1 and 2 pursuant to this decree, a European directive, an international convention or other legislation, in accordance with the same requirements.

The additional admission requirements referred to in paragraph 2 are intended to ensure that the student has acquired the knowledge and skills required for the studies in question. When the additional admission requirements consist of one or more additional course units, these may not represent more than 60 additional credits for the student, taking into account all the credits that he or she may otherwise use for admission. These course units are part of the student's study programme.

- § 2. In accordance with the general requirements established by the academic authorities, a student who holds a title, diploma, degree or certificate of higher education, in the French Community or outside it, which does not grant him or her eligibility for admission to a specialised master's course by virtue of the preceding paragraph, may nevertheless be admitted by the jury of the course in question, in accordance with the additional requirements that it establishes, if the totality of the higher education that he or she has completed or the expertise that he or she has acquired is valued by the jury to be at least 240 credits.
- § 3. By way of derogation from these general requirements, the academic authorities may also admit to a specialised master's course holders of a title, diploma, degree or certificate awarded outside the French Community which, in that system of origin, grants direct eligibility for postgraduate studies, even if the studies sanctioned by these credentials are not organised into distinct degree courses or within a time period of at least five years.

# Specific access requirements

Specific Admission Requirements

This programme is accessible to pharmacists holding a diploma from the French-speaking Community in Belgium or a recognised equivalent.

#### Admission procedure

Enrolments are made at the university chosen by the student who pays the corresponding fee in the institution of his choice. The degree is awarded by this same institution. Applications for admission should be addressed to the secretary's office of the School of Pharmacy, by means of a special form issued by the latter. Applications are examined by the Admission Committee for complementary masters (3rd cycle) and then by the Programme Management Committee. Notice of refusal is given to the applicant by the academic secretary.

# **Teaching method**

The lessons are divided into modules.

The methods used are both theoretical and practical.

Students will attend lectures given by teachers from the partner universities as well as professionals from the pharmaceutical industry or the Federal Public Service of Public Health. Mandatory related activities are organized: visits to companies or laboratories and exercises.

Students will complete an internship in a company, laboratory or a public body whoseactivities are related to drugs and legislation. It will prepare a report on the activities carried out during the course. This report will be presented to a jury composed of three scientists from each of the partner universities.

### **Evaluation**

The evaluation methods comply with the <u>regulations concerning studies and exams</u> (https://uclouvain.be/fr/decouvrir/ rgee.html). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

Student evaluation on the inter-university programme content will consist of a single oral session of exams per module (from A to F, described above).

An oral defence of the individual piece of work will also be organised and evaluated by an inter-university jury. In order to obtain official recognition by the Ministry of Public Health for the title "person responsible for the conformity of medication products by a pharmaceutical firm", the pharmacist who has obtained his inter-university degree as an industrial pharmacist is obliged to do a 6 months complementary apprenticeship in a pharmaceutical firm in accordance with the procedures laid down by the Royal Decree of 14 August, 1989.

#### **Contacts**

## **Curriculum Management**

Faculty

Structure entity Denomination Sector

Acronym

Postal address

Mandate(s)

• Dean : Raphaël Frédérick

Commission(s) of programme

• Ecole de pharmacie (FARM)

Other academic Supervisor(s)

· Joëlle Quetin-Leclercq

Jury

- Joëlle Quetin-Leclercq
- Laure Elens

Useful Contact(s)

- Secretary of pharmaceutical school: secretariat-farm@uclouvain.be
- Murielle Callier
- Guillaume Arnould

SSS/FASB

Faculty of Pharmacy and Biomedical Sciences (FASB)

Health Sciences (SSS)

**FASB** 

Avenue Mounier 73 - bte B1.73.02 1200 Woluwe-Saint-Lambert