



FARM1BA

2024 - 2025

FARM1BA - Introduction

Introduction

FARM1BA - Teaching profile

Learning outcomes

Students enrolled on the the Bachelor in Pharmacy course are preparing for the training offered in the Master in Pharmacy programme, on completion of which they will achieve the title of pharmacist. The aim of the programme is therefore to help the students become medication specialists able to improve patient health.

The training in the first year of the Bachelor programme is based on an in-depth study of the basic sciences (chemistry, biology, physics, anatomy, etc.) used in the context of pharmacy.

In the second year, the pharmaceutical element increases significantly, in particular via the study of pharmacology, medicinal plants, and an introduction to analytical chemistry and the chemical synthesis of medications.

The final year of the Bachelor programme further reinforces the foundation in pharmacy and initiates students into a work environment (compulsory work placement in a field of the student's choice). The programme as a whole enables students to acquire a base of knowledge and expertise in the basic sciences, as well as specialist training in pharmacy.

During the three years of the Bachelor's course, by coming to a better understanding of the use of a medication and its effect on the body, the students will develop their training and professional projects, which they will pursue throughout the Master's programme, with increasing independence.

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

1. Demonstrate pharmaceutical expertise: use a body of concepts and knowledge in pharmacy and health

1a. Display command and understanding of the fundamental principles and essential concepts of the basic sciences in the practice of pharmacy.

1b. Assimilate knowledge of chemistry, physicochemistry, biochemistry, pharmacognosy and pharmacology useful in the synthesis, design and analysis of medications.

1c. Incorporate knowledge of anatomy, physiology, immunology, microbiology, nutrition, pharmacology and pharmacokinetics, pathology, medical biology, semiology and psychology in order to understand the action of a medication on the body and plan its use.

2. Scientific approach: resolve pharmaceutical problems by using their knowledge and critical thinking

2a. Understand a defined pharmaceutical problem or issue.

2b. Display command of the relevant tools and sources of information related to the problem or issue concerned.

2c. Analyse, interpret and compare the information in a robust manner.

2d. Summarise the fundamental and necessary elements related to the problem or issue concerned.

Programme structure

The bachelor's of Pharmaceutical Sciences represents 180 credits.

A credit refers to " the volume of work that the student needs to produce to attain the study objectives".

The " major " of the programme consists of basic foundation studies for 60 credits (1st year) and specific studies (2nd and 3rd year) for 90 credits.

The major is completed by a course of 30 credits - an option, such as those offered on the "options menu", (advanced studies in Pharmaceutical Sciences), or in the form of a " minor " (an opening course in other disciplines). These courses of 30 credits may be followed on a parallel with the specific course.

Principal Subjects

The bachelor's studies enable the student to learn about the functioning of life, from the atom to society.

Atoms, molecules and the systems which govern them

General Chemistry, Analytical, Inorganic and Organic Life, - Biochemistry - Applied Physics - Biophysics - Processing Applied Data - Instrumental Analysis.

From plant cells to animal cells, from organic tissue to the human being

General, Cellular, Special and Molecular Biology - Cytology and Histology - Elements of Functional Anatomy - Immunology - Physiology - Microbiology - General Pathology - Botanical Introduction to Pharmacognosy - Medical Biochemistry

Medication

Organic Chemistry applied to Medication - Conception of Medication - Pharmacology - Introduction to Pharmacotherapy - Pharmacokinetics and Xeno-biotic Metabolism - Pharmacognosy - Pharmaceutical Chemistry

Man and Society, the individual in the professional world

Philosophy - English

Immersion internship in a pharmaceutical milieu and the corresponding introduction courses

FARM1BA Programme

Detailed programme by subject

- 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 3

o Majeure (150 credits)

o Des atomes, des molécules et des systèmes qui les régissent (67 credits)

● WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Alexandre Lazarescu (compensates) Eduardo Cortina Gil Fabio Maltoni	10 [q1] [60h+21h] [8 Credits] 🌐	X		
● WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Bryan Debin	10 [q2] [30h+21h] [5 Credits] 🌐	X		
● WMD1105	Chimie générale et minérale	Olivier Riant Alexandru Vlad	10 [q1] [60h+30h] [9 Credits] 🌐	X		
● WMD1106	ORGANIC CHEMISTRY	Mohamed Ayadim Olivier Riant Michael Singleton	10 [q2] [60h+30h] [9 Credits] 🌐	X		

				Year		
				1	2	3
○ WFARM1302	Pharmaceutical organic chemistry 	Raphaël Frédéric (coord.) Didier Lambert Séverine Ravez (compensates Raphaël Frédéric) Quentin Spillier	FR [q1+q2] [45h+30h] [6 Credits]  > <i>English-friendly</i>			

Year

1 2 3

○ Cours au choix de l'approfondissement (6 crédits)*L'étudiant choisit 6 crédits dans la liste ci-dessous.*

☼ WFARM1319	Pharmacognosy, case studies 🟡	Didier Lambert Joseph Lorent	EX [q2] [15h] [2 Credits] 🌐 > English-friendly			X
☼ WFARM1329	Advanced instrumental analysis 🟡	Marie-France Herent Giulio Muccioli (coord.)	EX [q2] [20h+10h] [2 Credits] 🌐 > English-friendly			X
☼ WFARM1339	Compléments de pharmacocinétique 🟡	Laure Elens	EX [q2] [15h] [2 Credits] 🌐 > English-friendly			X
☼ WFARM1359	Drug design en chimie pharmaceutique 🟡					

⌘ Formation partielle à l'étranger (Erasmus) (27 credits)

L'étudiant autorisé à réaliser une partie de son parcours à l'étranger au 2^e quadrimestre du 3^e bloc annuel est dispensé de 12 crédits de la majeure et de 15 de l'approfondissement. Le programme suivi à l'étranger est déterminé en accord avec le responsable académique du programme de l'UCLouvain. Pour plus de renseignements, consulter la rubrique internationalisation et s'adresser au secrétariat de l'école de pharmacie.

o Minor or additional module (30 credits)

L'étudiant qui ne choisit pas l'approfondissement en sciences pharmaceutiques ou l'approfondissement en sciences pharmaceutiques - recherche-, choisit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3. Maximum 1 élément(s)

List of available minors

During the bachelor's of Pharmaceutical Sciences, the student has the opportunity to further his knowledge in the various pharmaceutical domains, by selecting in-depth study options.

Instead of these options, the bachelor's programme may likewise include an option of a "minor", which will enable the student to open up new horizons. Minors in the following subjects : Biology, Chemistry, Law, Economics, Human Nutrition, Clinical Biomedical Sciences, Statistics, etc., may be envisaged, subject to the approval of the Teaching Committee of the School of Pharmacy.

- > [Minor in Law \(access\)](#) [en-prog-2024-minadroi]
- > [Minor in Antiquity: Egypt, Eastern World, Greece, Rome](#) [en-prog-2024-minanti]
- > [Minor in History of Art and Archeology](#) [en-prog-2024-minarke]
- > [Minor in Chinese studies](#) [en-prog-2024-minchin]
- > [Minor in Information and Communication](#) [en-prog-2024-mincomu]
- > [Minor in Culture and Creation](#) [en-prog-2024-mincucrea]
- > [Minor in Scientific Culture](#) [en-prog-2024-mincults]
- > [Minor in Development and Environment](#) [en-prog-2024-mindenv]
- > [Minor in Economics](#) [en-prog-2024-minecon]
- > [Minor in European Studies](#) [en-prog-2024-mineuro]
- > [Minor in Gender Studies](#) [en-prog-2024-mingenre]
- > [Minor in Mangement \(basic knowledge\)](#) [en-prog-2024-minogest]
- > [Minor in History](#) [en-prog-2024-minhist]
- > [Minor in Human and Social Sciences](#) [en-prog-2024-minhuso]
- > [Minor in Arabic language and Islamic civilization](#) [en-prog-2024-minislam]
- > [Minor in Philosophy](#) [en-prog-2024-minfilo]
- > [Minor in Medieval Studies](#) [en-prog-2024-minmedi]
- > [Minor in Musicology](#) [en-prog-2024-minmusi]
- > [Minor in Law](#) (openn 1 | 0 1 | h W n 0.2745 0.e11122.31900020 -ii43.2230072 271.58898926 Tm [()] TJ 0.6 g8n,..vhg'271.5889eF2 8 Tf 1

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

- LANGL1855** "Anglais médical" has prerequisite(s) LANGL1854
- LANGL1854 - Medical English
- WFARM1212** "Éléments de physiologie générale" has prerequisite(s) WMD1120P ET WMD1006
- WMD1120P - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general histology
- WFARM1213** "Physiologie des systèmes et éléments de physiopathologie" has prerequisite(s) WMD1120P ET WMD1006 ET WFARM1009
- WMD1120P - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general histology
 - WFARM1009 - Elements of general and functional anatomy
- WFARM1219** "Biophysique appliquée aux médicaments" has prerequisite(s) WMD1102 ET WMD1104 ET WMD1105
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
 - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
 - WMD1105 - Chimie générale et minérale
- WFARM1221** "Biochimie et biologie moléculaire" has prerequisite(s) WMD1106 ET WMD1120P
- WMD1106 - ORGANIC CHEMISTRY
 - WMD1120P - General biology and an experimental approach to biology
- WFARM1231** "Structure et stratégie de synthèse des médicaments" has prerequisite(s) WMD1105 ET WMD1106
- WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
- WFARM1232** "Pharmacologie générale" has prerequisite(s) WMD1120P ET WMD1006
- WMD1120P - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general histology
- WFARM1237** "Introduction botanique à la pharmacognosie" has prerequisite(s) WMD1120P
- WMD1120P - General biology and an experimental approach to biology
- WFARM1238** "Principes actifs d'origine naturelle" has prerequisite(s) WMD1120P
- WMD1120P - General biology and an experimental approach to biology
- WFARM1239** "Atelier informatique et de recherche bibliographique appliquée au médicament" has prerequisite(s) LANGL1854
- LANGL1854 - Medical English
- WFARM1243** "Introduction à la chimie analytique" has prerequisite(s) WMD1104 ET WMD1105 ET WMD1106 ET WFARM1003
- WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
 - WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
 - WFARM1003 - Practicals of general chemistry approach
- WFARM1244** "Travaux pratiques d'introduction à la chimie analytique" has prerequisite(s) WMD1104 ET WMD1105 ET WMD1106 ET WFARM1003
- WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
 - WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
 - WFARM1003 - Practicals of general chemistry approach
- WFARM1247** "Traitement statistique des données" has prerequisite(s) WMD1102
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
- WFARM1282** "Microbiologie générale" has prerequisite(s) WMD1120P
- WMD1120P - General biology and an experimental approach to biology
- WFARM1300** "Pharmacocinétique et métabolisme des xénobiotiques" has prerequisite(s) WFARM1221 ET WFARM1213

- WFARM1221 - Biochemistry and molecular biology
- WFARM1213 - Human physiology and basics of physiopathology

WFARM1302 "Chimie pharmaceutique" has prerequisite(s) WFARM1231 ET WFARM1232 ET WFARM1219

- WFARM1231 - Organical chemistry of drugs
- WFARM1232 - General Pharmacology
- WFARM1219 - Biophysics applied to the drugs

WFARM1303 "Biochimie médicale" has prerequisite(s) WFARM1221 ET WFARM1213

- WFARM1221 - Biochemistry and molecular biology
- WFARM1213 - Human physiology and basics of physiopathology

WFARM1305 "Eléments de pathologie humaine" has prerequisite(s) WFARM1221 ET WFARM1212 ET WFARM1213

- WFARM1221 - Biochemistry and molecular biology
- WFARM1212 - Eléments de physiologie générale
- WFARM1213 - Human physiology and basics of physiopathology

WFARM1306 "Microbiologie médicale" has prerequisite(s) WFARM1282

- WFARM1282 - General microbiology

WFARM1307 "Eléments de physico-chimie appliqués aux médicaments" has prerequisite(s) WFARM1243 ET WMD1102

- WFARM1243 - Introduction to analytical chemistry
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)

WFARM1309 "Stage d'immersion professionnelle dans le monde pharmaceutique" has prerequisite(s) WFARM1213 ET WFARM1239 ET WFARM1232

- WFARM1213 - Human physiology and basics of physiopathology
- WFARM1239 - Computerized workshop and research on scientific information related to drugs.
- WFARM1232 - General Pharmacology

WFARM1310

- WFARM1231 - [Organical chemistry of drugs](#)
- WFARM1232 - [General Pharmacology](#)
- WFARM1219 - [Biophysics applied to the drugs](#)

WFARM1369 "[Evaluation de la biodistribution et de l'effet d'un médicament par des méthodes non invasives](#)" has prerequisite(s) WFARM1232 ET WFARM1219

- WFARM1232 - [General Pharmacology](#)
- WFARM1219 - [Biophysics applied to the drugs](#)

WFARM1370 "[Formation à la communication scientifique](#)" has prerequisite(s) LANGL1855 ET WFARM1239

- LANGL1855 - [Medical English](#)
- WFARM1239 - [Computerized workshop and research on scientific information related to drugs.](#)

WFARM1379 "[Exercices pratiques de biochimie médicale](#)" has prerequisite(s) WFARM1221 ET WFARM1213

• WFARM1221 [LANGL1855] T-cul351 m0 g /F5 8 Tf 1 0 0 -1 8.39999962 41.84500193 Tm [(•)] TJ /F1 8 Tf 1 0 0 -1 12.80000019 32.52500153 Tm [(•)]

WET 0104RM1239

○ WMD1105

Chimie générale et minérale

FARM1BA - 2ND ANNUAL UNIT

- 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, ...)
-

FARM1BA - 3RD ANNUAL UNIT

- Mandatory
 - ✘ Optional
 - △ Not offered in 2024-2025
 - ⊖ Not offered in 2024-2025 but offered the following year
 - ⊕
-

○ WFARM1324	General pharmacognosy 🟡	Didier Lambert	FB [q1] [15h] +15h] [2 Credits] 🌐 > English- friendly
○ WFARM1325	Specialized Pharmacognosy, including phytotherapy 🟡	Michel Frederich Allison Ledoux	FB [q2] [15h] +10h] [2 Credits] 🌐 > English- friendly
○ WFARM1300	Pharmacokinetics and metabolism of xenobiotics 🟡	Nathalie Delzenne (coord.) Laure Elens	FB [q1] [30h] +30h] [4 Credits] 🌐 > English- friendly
○ WFARM1310	Inorganic drugs with use diagnosis and therapeutic 🟡	Bernard Gallez	FB [q1] [30h] [3 Credits] 🌐

⌘ Additional module in Pharmacy

○ Troisième bloc annuel de bachelier

Dans le cadre du complément à la majeure en bloc annuel 3, l'étudiant choisit soit de poursuivre l'approfondissement débuté en 2e bloc annuel, soit de bifurquer de l'approfondissement en sciences pharmaceutiques vers l'approfondissement en sciences pharmaceutiques - recherche, soit de réaliser une partie de sa formation à l'étranger (Erasmus).

⌘ Poursuite de l'approfondissement (9 crédits obligatoires et 6 crédits au choix)

○ WFARM1309	Internships in the pharmaceutical world 🟡	Ahalieyah Anantharajah Lidvine Boland Anne des Rieux Giulio Muccioli (coord.) Stefanie Quennery Stéphanie Valentin	FB [q2] [7.5h] [5 Credits] 🌐
		Raphaël Frédéric Emmanuel Hermans (coord.) Bénédicte Jordan Joseph Lorent Giulio Muccioli	FB [q2] [45h] [4 Credits] 🌐 > English- friendly

○ Cours au choix de l'approfondissement

l'étudiant choisit 6 crédits dans la liste ci-dessous.

⌘ WFARM1319	Pharmacognosy, case studies 🟡	Didier Lambert Joseph Lorent	FB [q2] [15h] [2 Credits] 🌐 > English- friendly
○ WFARM1329	Advanced instrumental analysis 🟡	Marie-France Herent Giulio Muccioli (coord.)	FB [q2] [20h] +10h] [2 Credits] 🌐 > English- friendly
⌘ WFARM1339	Compléments de pharmacocinétique 🟡	Laure Elens	FB [q2] [15h] [2 Credits] 🌐 > English- friendly

FARM1BA - Information

Access Requirements

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.

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](#)
- [Access based on validation of professional experience](#)
- [Special requirements to access some programmes](#)

General access requirements

Except as otherwise provided by other specific legal provisions, admission to undergraduate courses leading to the award of a Bachelor's degree will be granted to students with one of the following qualifications :

1. A Certificate of Upper Secondary Education issued during or after the 1993-1994 academic year by an establishment offering full-time secondary education or an adult education centre in the French Community of Belgium and, as the case may be, approved if it was issued by an educational institution before 1 January 2008 or affixed with the seal of the French Community if it was issued after this date, or an equivalent certificate awarded by the Examination Board of the French Community during or after 1994;
2. A Certificate of Upper Secondary Education issued no later than the end of the 1992-1993 academic year, along with official documentation attesting to the student's ability to pursue higher education for students applying for a full-length undergraduate degree programme;
3. A diploma awarded by a higher education institution within the French Community that confers an academic degree issued under the above-mentioned Decree, or a diploma awarded by a university or institution dispensing full-time higher education in accordance with earlier legislation;
4. A higher education certificate or diploma awarded by an adult education centre;
5. A pass certificate for one of the [entrance examinations](#) organized by higher education institutions or by an examination board of the French Community; this document gives admission to studies in the sectors, fields or programmes indicated therein;
6. A diploma, certificate of studies or other qualification similar to those mentioned above, issued by the Flemish Community of Belgium, the German Community of Belgium or the Royal Military Academy;
7. A diploma, certificate of studies or other qualification obtained abroad and deemed equivalent to the first four mentioned above by virtue of a law, decree, European directive or international convention;

Note:

Requests for equivalence must be submitted to the Equivalence department ([Service des équivalences](#)) of the Ministry of Higher Education and Scientific Research of the French Community of Belgium in compliance with the official deadline.

The following two qualifications are automatically deemed equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire supérieur – CESS):

- European Baccalaureate issued by the Board of Governors of a European School,
- International Baccalaureate issued by the International Baccalaureate Office in Geneva.

8. Official documentation attesting to a student's ability to pursue higher education (diplôme d'aptitude à accéder à l'enseignement supérieur - DAES), issued by the Examination Board of the French Community.

Specific access requirements

- Access to bachelor programmes for candidates of nationality outside the European Union who are not assimilated to Belgian nationals is subject to the following criteria:
 - not have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2024-2025, you must have obtained your diploma during the academic years 2021-2022, 2022-2023 ou 2023-2024. In the French Community of Belgium, the academic year runs from September 14 to September 13
 - not already hold an undergraduate degree
- Candidates, whatever their nationality, with a secondary school diploma **from a country outside the European Union**, must have obtained an average of 13/20 minimum or, failing that, have obtained this average, have passed one year of study in Belgium (for example special Maths / sciences). A non-successful year will not be taken into consideration.

Entity

Structure entity	SSS/FASB/FARM
Denomination	(FARM)
Faculty	Faculty of Pharmacy and Biomedical Sciences (FASB)
Sector	Health Sciences (SSS)
Acronym	FARM
Postal address	Avenue Mounier 73 - bte B1.73.03 1200 Woluwe-Saint-Lambert Tel: +32 (0)2 764 73 60

Academic supervisor: [Françoise Van Bambeke](#)

Other academic Supervisor(s)

- [Giulio Muccioli](#)

Jury

- Président des 3 années de bachelier: [Bernard Gallez](#)
- Secrétaire de jury de la 1re année: [Giulio Muccioli](#)

Useful Contact(s)

- Personne de contact de la 1re année de bachelier: secretariat-bac1-fasb@uclouvain.be
- Personne de contact des 2e et 3e années de bachelier: secretariat-farm@uclouvain.be
- Responsable administratif de la 1re année de bachelier: admin7df100-12.8005r1ve1e@uclouvain.be

