

**At Bruxelles Woluwe - 180 credits - 3 years - Day schedule - In French**Dissertation/Graduation Project : **NO** - Internship : **optional**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)**Programme acronym: **FARM1BA** - Francophone Certification Framework: 6**Table of contents**

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## FARM1BA - Introduction

### Introduction

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## 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.

2e. Implement an experiment protocol to formulate, produce and characterise a medication.

2f. Learn how to work in a team.

3. Communication: communicate in an effective, robust and respectful manner from a professional perspective

3a. Tailor the communication to obtain and provide clear, complete and accurate information (verbal and/or written) in accordance with the relevant standards, if necessary in another language.

3b. Use information and communication technologies appropriately.

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

4a. Observe the rules of safety and professional best practice in a scientific context.

4b. Adopt ethical values and comply with scientific and professional agreements.

4c. Understand and respect the limits of their remit.

4d. Conduct themselves as responsible actors in their areas of expertise.

5. Quality: carry out self-assessment, supplement their knowledge and adapt their approach

5a. Develop a self-assessment approach to define their training needs in order to respond to specific situations.

5b. Utilise the individual and collective training tools in a robust and independent manner.

5c. Adapt to a variety of learning situations and take advantage of them while managing stress.

## 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 2022-2023
- Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ 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...)

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)	Fabio Maltoni Geoffroy Piroux Geoffroy Piroux (compensates Fabio Maltoni)	10 [q1] [60h+21h] [8 Credits] 🌐	X		
○ WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Michel Herquet (compensates Fabio Maltoni)	10 [q2] [30h+21h] [5 Credits] 🌐	X		
○ WMD1105	Chimie générale et minérale	Mark Rider (coord.) Alexandru Vlad	10 [q1] [60h+30h] [9 Credits] 🌐	X		

				Year		
				1	2	3
○ WMD1106	ORGANIC CHEMISTRY	Olivier Riant Michael Singleton	PR [q2] [60h+30h] [9 Credits]	x		
○ WFARM1003	Practicals of general chemistry approach	Mark Rider	PR [q2] [0h+30h] [2 Credits]	x		
○ WFARM1243	Introduction à la chimie analytique	Marie-France Herent Giulio Muccioli (coord.)	PR [q2] [30h] [3 Credits] > English-friendly		x	
○ WFARM1244	Travaux pratiques d'introduction à la chimie analytique	Marie-France Herent Giulio Muccioli (coord.)	PR [q2] [0h+105h] [3 Credits]		x	
○ WFARM1231	Organical chemistry of drugs	Mohamed Ayadim Raphaël Frédéric (coord.)	PR [q1+q2] [45h+120h] [10 Credits] > English-friendly		x	
○ WFARM1221	Biochemistry and molecular biology	Nathalie Delzenne (coord.) Frédéric Lemaigre Joseph Lorent	PR [q1] [75h+37.5h] [10 Credits]		x	
○ WFARM1312	Instrumental analysis applied to pharmaceutical sciences	Marie-France Herent Giulio Muccioli (coord.)	PR [q1] [30h] [3 Credits] > English-friendly			x
○ WFARM1313	Travaux pratiques d'analyse instrumentale	Marie-France Herent Giulio Muccioli (coord.)	PR [q1] [0h+105h] [3 Credits]			x
○ WFARM1383	Génétique et biotechnologie pharmaceutiques	Jean-François Collet Jean Baptiste Demoulin (coord.) Amandine Everard (compensates Laure Bindels) Sophie Lucas	PR [q2] [30h] [2 Credits]			x

### o De la cellule végétale à la cellule animale, des tissus à l'être humain (40 credits)

○ WMD1120P	General biology and an experimental approach to biology	Jean Baptiste Demoulin (coord.) Pascal Kienlen-Campard	PR [q1] [65h+25h] [9 Credits] > English-friendly	x		
○ WMD1006	Cytology and general histology	Christophe Pierreux	PR [q2] [10h+40h] [5 Credits]	x		
○ WFARM1009	Elements of general and functional anatomy	Christine Galant (coord.) Catherine Hubert Alain Poncelet	PR [q2] [30h] [3 Credits]	x		
○ WFARM1212	Eléments de physiologie générale	Olivier Feron	PR [q1] [15h+7.5h] [2 Credits] > English-friendly		x	
○ WFARM1213	Human physiology and basics of physiopathology	Olivier Feron (coord.) Emmanuel Hermans Philippe Lysy	PR [q2] [60h] [6 Credits] > English-friendly		x	
○ WFARM1282	General microbiology	Thomas Michiels	PR [q1] [20h+15h] [3 Credits]		x	
○ WFARM1305	Elements of General Pathology	Mélanie Dechamps Olivier Feron (coord.)	PR [q2] [30h] [3 Credits] > English-friendly			x
○ WFARM1306	Medical microbiology	Benoît Kabamba-Mukadi Hector Rodriguez- Villalobos (coord.) Alexia Verroken	PR [q1] [45h] [4 Credits]			x
○ WSBIM1334F	general immunology	Sophie Lucas (coord.)	PR [q1] [35h] [3 Credits] > English-friendly			x
○ WFARM1303	Clinical Chemistry	Joseph Dewulf Catherine Fillee Damien Gruson Vincent Haufroid (coord.) Marie-Astrid van Dievoet	PR [q2] [20h] [2 Credits]			x

### o Du médicament (37 credits)

○ WFARM1004	The molecular aspect of drugs	Mohamed Ayadim Raphaël Frédéric (coord.)	PR [q2] [15h+15h] [2 Credits] > English-friendly	x		
○ WFARM1008	Design of the drug	Giulio Muccioli	PR [q2] [15h+15h] [2 Credits]	x		
○ WFARM1232	General Pharmacology	Emmanuel Hermans	PR [q1] [15h+7.5h] [2 Credits]		x	
○ WFARM1237	Introduction botanique à la pharmacognosie 1re partie	Stephan Declerck Muriel Quinet (coord.)	PR [q1] [22.5h+15h] [3 Credits]		x	

				Year		
				1	2	3
○ WFARM1238	Introduction botanique à la pharmacognosie 2e partie	Joëlle Leclercq (coord.) Muriel Quinet (coord.)	FR [q2] [22.5h+15h] [3 Credits]		x	
○ WFARM1302	Pharmaceutical organic chemistry	Raphaël Frédéric (coord.) Didier Lambert Séverine Ravez (compensates Raphaël Frédéric)	FR [q1+q2] [45h+30h] [6 Credits] > English-friendly			x
○ WFARM1307	Physical pharmacy	Tom Leyssens	FR [q2] [15h] [2 Credits]			x
○ WFARM1332	Pharmacologie générale, 2e partie	Mireille Al Houayek Chantal Dessy (coord.)	FR [q1] [36h] [4 Credits] > English-friendly			x
○ WFARM1324	Pharmacognosy	Joëlle Leclercq	FR [q1] [22.5h+15h] [3 Credits] > English-friendly			x
○ WFARM1325	Pharmacognosie : plantes médicinales	Joëlle Leclercq	FR [q2] [22.5h+15h] [3 Credits] > English-friendly			x
○ WFARM1300	Pharmacokinetics and metabolism of xenobiotics	Nathalie Delzenne Laure Elens	FR [q1] [30h+30h] [4 Credits] > English-friendly			x
○ WFARM1310	Inorganic drugs with use diagnosis and therapeutic	Bernard Gallez	FR [q1] [30h] [3 Credits]			x

### ○ L'homme et la société, l'individu dans le monde professionnel (6 credits)

○ WFARM1160	Philosophy	Charlotte Luyckx (compensates Mylene Botbol)	FR [q1] [30h] [3 Credits]	x		
○ LANGL1854	Medical English	Julie Callens (compensates Ariane Halleux) Aurélie Deneumoustier Carlo Lefevre (coord.) Hila Peer Mark Theodore Pertuit Marine Volpe (compensates Ariane Halleux)	FR [q2] [30h] [3 Credits]	x		

### ⊗ Additionnal module in Pharmacy (30 credits)

#### ○ Deuxième bloc annuel de bachelier

○ LANGL1855	Medical English	Timothy Byrne (coord.) Aurélie Deneumoustier Carlo Lefevre (coord.)	FR [q1 or q2] [30h] [3 Credits]		x	
○ WFARM1219	Biophysics applied to the drugs	Bernard Gallez (coord.) Joseph Lorent	FR [q1] [30h+15h] [3 Credits]		x	
○ WFARM1247	Statistical data processing	Eugen Pircalabelu	FR [q2] [15h+15h] [3 Credits]		x	
○ WFARM1239	Computerized workshop and research on scientific information related to drugs.	Roberta Gualdani (compensates Laure Bindels)	FR [q1] [5h+10h] [2 Credits]		x	
○ WFARM1202	Eléments d'épidémiologie appliquée aux sciences pharmaceutiques et biomédicales	Marie Lambert (compensates Séverine Henrard)	FR [q2] [20h] [2 Credits] > English-friendly		x	
○ WFARM1290	Communication professionnelle en santé	Olivier Costa Muriel Rocour (coord.) Stephan Van den Broucke	FR [q2] [15h+10h] [2 Credits]		x	

#### ○ 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) (15 credits)

○ WFARM1309	Internships in the pharmaceutical world	Ahalieyah Anantharajah Lidvine Boland Giulio Muccioli (coord.) Stefanie Quennery Stéphanie Valentin	FR [q2] [7.5h] [5 Credits]			x
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				Year		
				1	2	3
WFARM1349	Integrated Seminar in Pharmaceutical Sciences	Mireille Al Houayek (compensates) Raphaël Frédéric Emmanuel Hermans Bénédicte Jordan Joseph Lorent Giulio Muccioli	FR [q2] [45h] [4 Credits] > English-friendly			X

### ○ Cours au choix de l'approfondissement (6 credits)

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

WFARM1319	Pharmacognosy, case studies	Joëlle Leclercq	FR [q2] [15h] [2 Credits] > English-friendly			X
WFARM1329	Advanced instrumental analysis	Marie-France Herent Giulio Muccioli (coord.)	FR [q2] [20h+10h] [2 Credits] > English-friendly			X
WFARM1339	Compléments de pharmacocinétique	Laure Elens	FR [q2] [15h] [2 Credits] > English-friendly			X
WFARM1359	Drug design en chimie pharmaceutique	Raphaël Frédéric (coord.) Didier Lambert Séverine Ravez (compensates) Raphaël Frédéric	FR [q2] [15h] [2 Credits] > English-friendly			X
WFARM1369	Evaluation de la biodistribution et de l'effet d'un médicament par des méthodes non invasives	Bernard Gallez	FR [q2] [15h] [2 Credits]			X
WFARM1379	Seminars of Clinical Chemistry	Joseph Dewulf Catherine Fillee Damien Gruson (coord.) Vincent Haufroid Diane Maisin	FR [q2] [0h+30h] [2 Credits]			X
WFARM1370	Formation à la communication scientifique	Timothy Byrne (coord.) Olivia Dalleur Aurélie Deneumoustier	FR [q2] [15h+30h] [4 Credits]			X

### ✳ Formation partielle à l'étranger (Erasmus) (27 credits)

L'étudiant autorisé à réaliser une partie de son parcours à l'étranger au 2<sup>e</sup> quadrimestre du 3<sup>e</sup> 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.

### ✳ Approfondissement en sciences pharmaceutiques - recherche (30 credits)

#### ○ Deuxième bloc annuel de bachelier (15 credits)

##### ○ Cours obligatoires

LANGL1855	Medical English	Timothy Byrne (coord.) Aurélie Deneumoustier Carlo Lefevre (coord.)	FR [q1 or q2] [30h] [3 Credits]			X
WFARM1219	Biophysics applied to the drugs	Bernard Gallez (coord.) Joseph Lorent	FR [q1] [30h+15h] [3 Credits]			X
WFARM1247	Statistical data processing	Eugen Pircalabelu	FR [q2] [15h+15h] [3 Credits]			X
WFARM1239	Computerized workshop and research on scientific information related to drugs.	Roberta Galdani (compensates) Laure Bindels	FR [q1] [5h+10h] [2 Credits]			X
WFARM1202	Eléments d'épidémiologie appliquée aux sciences pharmaceutiques et biomédicales	Marie Lambert (compensates) Séverine Henrard	FR [q2] [20h] [2 Credits] > English-friendly			X
WFARM1290	Communication professionnelle en santé	Olivier Costa Muriel Rocour (coord.) Stephan Van den Broecke	FR [q2] [15h+10h] [2 Credits]			X

#### ○ Troisième bloc annuel de bachelier (15 credits)

Dans le cadre de la mineure d'approfondissement en sciences pharmaceutiques - recherche, l'étudiant est tenu de choisir l'une des deux possibilités suivantes. Un transfert vers le programme de l'approfondissement en sciences pharmaceutiques est toutefois possible.

WFARM1380	Stage d'immersion en recherche pharmaceutique		FR [q2] [] [7 Credits] > English-friendly			X
WFARM1311	Projet expérimental en sciences pharmaceutiques		FR [q2] [] [8 Credits] > English-friendly			X

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

*L'étudiant autorisé à réaliser une partie de son parcours à l'étranger au 2<sup>e</sup> quadrimestre du 3<sup>e</sup> 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)**

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*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.*

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## 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-2022-minadroi ]
- > [Minor in Antiquity: Egypt, Eastern World, Greece, Rome](#) [ en-prog-2022-minanti ]
- > [Minor in History of Art and Archeology](#) [ en-prog-2022-minarke ]
- > [Minor in Chinese studies](#) [ en-prog-2022-minchin ]
- > [Minor in Information and Communication](#) [ en-prog-2022-mincomu ]
- > [Minor in Culture and Creation](#) [ en-prog-2022-mincucrea ]
- > [Minor in Scientific Culture](#) [ en-prog-2022-minculsts ]
- > [Minor in Development and Environment](#) [ en-prog-2022-mindenv ]
- > [Minor in Economics](#) [ en-prog-2022-minecon ]
- > [Minor in European Studies](#) [ en-prog-2022-mineuro ]
- > [Minor in French Studies](#) [ en-prog-2022-minfran ]
- > [Minor in Gender Studies](#) [ en-prog-2022-mingenre ]
- > [Minor in Geography](#) [ en-prog-2022-mingeog ]
- > [Minor in Management \(basic knowledge\)](#) [ en-prog-2022-minogest ]
- > [Minor in History](#) [ en-prog-2022-minhist ]
- > [Minor in Human and Social Sciences](#) [ en-prog-2022-minhuso ]
- > [Minor in Arabic language and Islamic civilization](#) [ en-prog-2022-minislam ]
- > [Minor in Philosophy](#) [ en-prog-2022-minfilo ]
- > [Minor in Linguistics](#) [ en-prog-2022-minling ]
- > [Minor in Literary Studies](#) [ en-prog-2022-minlitt ]
- > [Minor in Medieval Studies](#) [ en-prog-2022-minmedi ]
- > [Minor in Musicology](#) [ en-prog-2022-minmusi ]
- > [Minor in Law \(openness\)](#) [ en-prog-2022-minodroi ]
- > [Minor in Economics \(open\)](#) [ en-prog-2022-minoeco ]
- > [Minor in Oriental Studies](#) [ en-prog-2022-minori ]
- > [Minor in Sciences of Religions \(openness\)](#) [ en-prog-2022-minreli ]
- > [Minor in Sociology and Anthropology](#) [ en-prog-2022-minsoca ]
- > [Minor in Population and Development Studies](#) [ en-prog-2022-minsped ]
- > [Minor in Political Sciences](#) [ en-prog-2022-minspol ]
- > [Minor in Statistics, Actuarial Sciences and Data Sciences](#) [ en-prog-2022-minstat ]
- > [Minor in numerical technologies and society](#) [ en-prog-2022-minstic ]
- > [Minor in Christian Theology](#) [ en-prog-2022-mintheo ]
- > [Additional module in Pharmacy](#) [ en-prog-2022-appfarm ]
- > [Approfondissement en sciences pharmaceutiques - recherche](#) [ en-prog-2022-appfarr ]
- > [Minor in Biomedicine \(openness\)](#) [ en-prog-2022-minsbim ]

## 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](https://uclouvain.be/fr/decouvrir/rgee.html) (<https://uclouvain.be/fr/decouvrir/rgee.html>).

### # Prerequisites list

- LANGL1855** "Anglais médical" has prerequisite(s) LANGL1854
- LANGL1854 - Medical English
- WFARM1202** "Éléments d'épidémiologie appliquée aux sciences pharmaceutiques et biomédicales" has prerequisite(s) WMD1102 ET WMD1104 ET WFARM1008 ET LANGL1854
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
  - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
  - WFARM1008 - Design of the drug
  - LANGL1854 - Medical English
- WFARM1212** "Éléments de physiologie générale" has prerequisite(s) WMD1102 ET WMD1104 ET WMD1120P ET WMD1006
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
  - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
  - 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) WMD1102 ET WMD1104 ET WMD1120P ET WMD1006 ET WFARM1009
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
  - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
  - 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 ET WMD1006
- WMD1106 - ORGANIC CHEMISTRY
  - WMD1120P - General biology and an experimental approach to biology
  - WMD1006 - Cytology and general histology
- WFARM1231** "Structure et stratégie de synthèse des médicaments" has prerequisite(s) WMD1105 ET WMD1106 ET WFARM1003 ET WFARM1004
- WMD1105 - Chimie générale et minérale
  - WMD1106 - ORGANIC CHEMISTRY
  - WFARM1003 - Practicals of general chemistry approach
  - WFARM1004 - The molecular aspect of drugs
- WFARM1232** "Pharmacologie générale" has prerequisite(s) WMD1102 ET WMD1120P ET WMD1006
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
  - WMD1120P - General biology and an experimental approach to biology
  - WMD1006 - Cytology and general histology
- WFARM1237** "Introduction botanique à la pharmacognosie 1re partie" has prerequisite(s) WMD1105 ET WMD1120P ET WMD1006
- WMD1105 - Chimie générale et minérale
  - WMD1120P - General biology and an experimental approach to biology
  - WMD1006 - Cytology and general histology
- WFARM1238** "Introduction botanique à la pharmacognosie 2e partie" has prerequisite(s) WMD1105 ET WMD1120P ET WMD1006
- WMD1105 - Chimie générale et minérale
  - WMD1120P - General biology and an experimental approach to biology
  - WMD1006 - Cytology and general histology
- 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) WMD1102 ET WMD1105 ET WMD1106 ET WFARM1003

  - WMD1102 - [Physique expérimentale et introduction mathématique aux sciences expérimentales \(1e partie\)](#)
  - 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) WMD1102 ET WMD1105 ET WMD1106 ET WFARM1003

  - WMD1102 - [Physique expérimentale et introduction mathématique aux sciences expérimentales \(1e partie\)](#)
  - WMD1105 - [Chimie générale et minérale](#)
  - WMD1106 - [ORGANIC CHEMISTRY](#)
  - WFARM1003 - [Practicals of general chemistry approach](#)
- WFARM1247** "Traitement statistique des données" has prerequisite(s) WMD1102 ET LANGL1854

  - WMD1102 - [Physique expérimentale et introduction mathématique aux sciences expérimentales \(1e partie\)](#)
  - LANGL1854 - [Medical English](#)
- WFARM1282** "Microbiologie générale" has prerequisite(s) WMD1120P ET WMD1006

  - WMD1120P - [General biology and an experimental approach to biology](#)
  - WMD1006 - [Cytology and general histology](#)
- WFARM1290** "Communication professionnelle en santé" has prerequisite(s) WFARM1008 ET WFARM1160

  - WFARM1008 - [Design of the drug](#)
  - WFARM1160 - [Philosophy](#)
- 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) WFARM1008 ET WFARM1231 ET WFARM1232 ET WFARM1219

  - WFARM1008 - [Design of the drug](#)
  - 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 WFARM1219

  - WFARM1243 - [Introduction à la chimie analytique](#)
  - WFARM1219 - [Biophysics applied to the drugs](#)
- 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** "Médicaments inorganiques à usage diagnostique et thérapeutique" has prerequisite(s) WFARM1219

  - WFARM1219 - [Biophysics applied to the drugs](#)
- WFARM1311** "Projet expérimental en sciences pharmaceutiques" has prerequisite(s) LANGL1855 ET WFARM1247 ET WFARM1239

  - LANGL1855 - [Medical English](#)
  - WFARM1247 - [Statistical data processing](#)
  - WFARM1239 - [Computerized workshop and research on scientific information related to drugs.](#)
- WFARM1312** "Analyse instrumentale appliquée aux sciences pharmaceutiques" has prerequisite(s) WMD1105 ET WFARM1243 ET WFARM1219

  - WMD1105 - [Chimie générale et minérale](#)
  - WFARM1243 - [Introduction à la chimie analytique](#)
  - WFARM1219 - [Biophysics applied to the drugs](#)
- WFARM1313** "Travaux pratiques d'analyse instrumentale" has prerequisite(s) WFARM1243 ET WFARM1244 ET WFARM1219

  - WFARM1243 - [Introduction à la chimie analytique](#)
  - WFARM1244 - [Travaux pratiques d'introduction à la chimie analytique](#)
  - WFARM1219 - [Biophysics applied to the drugs](#)
- WFARM1319** "Pharmacognosie-étude de cas" has prerequisite(s) WFARM1237 ET WFARM1238

  - WFARM1237 - [Introduction botanique à la pharmacognosie 1re partie](#)

- WFARM1238 - [Introduction botanique à la pharmacognosie 2e partie](#)
- WFARM1324** "[Pharmacognosie générale](#)" has prerequisite(s) WFARM1237 ET WFARM1238
  - WFARM1237 - [Introduction botanique à la pharmacognosie 1re partie](#)
  - WFARM1238 - [Introduction botanique à la pharmacognosie 2e partie](#)
- WFARM1325** "[Pharmacognosie : plantes médicinales](#)" has prerequisite(s) WFARM1237 ET WFARM1238
  - WFARM1237 - [Introduction botanique à la pharmacognosie 1re partie](#)
  - WFARM1238 - [Introduction botanique à la pharmacognosie 2e partie](#)
- WFARM1329** "[Compléments d'analyse instrumentale](#)" has prerequisite(s) WMD1105 ET WFARM1243 ET WFARM1219
  - WMD1105 - [Chimie générale et minérale](#)
  - WFARM1243 - [Introduction à la chimie analytique](#)
  - WFARM1219 - [Biophysics applied to the drugs](#)
- WFARM1332** "[Pharmacologie générale, 2e partie](#)" has prerequisite(s) WFARM1213 ET WFARM1232
  - WFARM1213 - [Human physiology and basics of physiopathology](#)
  - WFARM1232 - [General Pharmacology](#)
- WFARM1339** "[Compléments de pharmacocinétique](#)" has prerequisite(s) WFARM1221 ET WFARM1213
  - WFARM1221 - [Biochemistry and molecular biology](#)
  - WFARM1213 - [Human physiology and basics of physiopathology](#)
- WFARM1349** "[Séminaire intégré en sciences pharmaceutiques](#)" has prerequisite(s) WFARM1243 ET WFARM1231 ET WFARM1213 ET WFARM1232 ET WFARM1239
  - WFARM1243 - [Introduction à la chimie analytique](#)
  - WFARM1231 - [Organical chemistry of drugs](#)
  - WFARM1213 - [Human physiology and basics of physiopathology](#)
  - WFARM1232 - [General Pharmacology](#)
  - WFARM1239 - [Computerized workshop and research on scientific information related to drugs.](#)
- WFARM1359** "[Drug design en chimie pharmaceutique](#)" has prerequisite(s) WFARM1008 ET WFARM1231 ET WFARM1232 ET WFARM1219
  - WFARM1008 - [Design of the drug](#)
  - 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
  - LANGL1855 - [Medical English](#)
- WFARM1379** "[Exercices pratiques de biochimie médicale](#)" has prerequisite(s) WMD1006 ET WFARM1221 ET WFARM1213
  - WMD1006 - [Cytology and general histology](#)
  - WFARM1221 - [Biochemistry and molecular biology](#)
  - WFARM1213 - [Human physiology and basics of physiopathology](#)
- WFARM1380** "[Stage d'immersion en recherche pharmaceutique](#)" has prerequisite(s) LANGL1855 ET WFARM1247 ET WFARM1239
  - LANGL1855 - [Medical English](#)
  - WFARM1247 - [Statistical data processing](#)
  - WFARM1239 - [Computerized workshop and research on scientific information related to drugs.](#)
- WFARM1383** "[Génétique et biotechnologie pharmaceutiques](#)" has prerequisite(s) WFARM1221 ET WFARM1282
  - WFARM1221 - [Biochemistry and molecular biology](#)
  - WFARM1282 - [General microbiology](#)
- WSBIM1334F** "[Immunologie générale \(partim FARM\)](#)" has prerequisite(s) WFARM1221 ET WFARM1282
  - WFARM1221 - [Biochemistry and molecular biology](#)
  - WFARM1282 - [General microbiology](#)

## The programme's courses and learning outcomes

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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.

## Detailed programme per annual block

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## FARM1BA - 1ST ANNUAL UNIT

- Mandatory
- ⊗ Optional
- △ Not offered in 2022-2023
- ⊖ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ 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 Majeure

#### o Des atomes, des molécules et des systèmes qui les régissent

○ WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Fabio Maltoni Geoffroy Piroux Geoffroy Piroux (compensates Fabio Maltoni)	FR [q1] [60h +21h] [8 Credits] 🌐
○ WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Michel Herquet (compensates Fabio Maltoni)	FR [q2] [30h +21h] [5 Credits] 🌐
○ WMD1105	Chimie générale et minérale	Mark Rider (coord.) Alexandru Vlad	FR [q1] [60h +30h] [9 Credits] 🌐
○ WMD1106	ORGANIC CHEMISTRY	Olivier Riant Michael Singleton	FR [q2] [60h +30h] [9 Credits] 🌐
○ WFARM1003	Practicals of general chemistry approach	Mark Rider	FR [q2] [0h +30h] [2 Credits] 🌐

#### o De la cellule végétale à la cellule animale, des tissus à l'être humain

○ WMD1120P	General biology and an experimental approach to biology	Jean Baptiste Demoulin (coord.) Pascal Kienlen-Campard	FR [q1] [65h +25h] [9 Credits] 🌐 > English- friendly
○ WMD1006	Cytology and general histology	Christophe Pierreux	FR [q2] [10h +40h] [5 Credits] 🌐
○ WFARM1009	Elements of general and functional anatomy	Christine Galant (coord.) Catherine Hubert Alain Poncelet	FR [q2] [30h] [3 Credits] 🌐

#### o Du médicament

○ WFARM1004	The molecular aspect of drugs	Mohamed Ayadim Raphaël Frédéric (coord.)	FR [q2] [15h +15h] [2 Credits] 🌐 > English- friendly
○ WFARM1008	Design of the drug	Giulio Muccioli	FR [q2] [15h +15h] [2 Credits] 🌐

#### o L'homme et la société, l'individu dans le monde professionnel

○ WFARM1160	Philosophy	Charlotte Luyckx (compensates Mylene Botbol)	FR [q1] [30h] [3 Credits] 🌐
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<p>○ LANGL1854</p>	<p>Medical English</p>	<p>Julie Callens (compensates Ariane Halleux) Aurélie Deneumoustier Carlo Lefevre (coord.) Hila Peer Mark Theodore Pertuit Marine Volpe (compensates Ariane Halleux)</p>	<p>EN [q2] [30h] [3 Credits] ⓘ</p>
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**FARM1BA - 2ND ANNUAL UNIT**

- Mandatory
- ⊗ Optional
- △ Not offered in 2022-2023
- ⊖ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ 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 Majeure****o Des atomes, des molécules et des systèmes qui les régissent**

○ WFARM1243	<a href="#">Introduction à la chimie analytique</a> ■	Marie-France Herent Giulio Muccioli (coord.)	[FR] [q2] [30h] [3 Credits] ⊕ > English- friendly
○ WFARM1244	<a href="#">Travaux pratiques d'introduction à la chimie analytique</a> ■	Marie-France Herent Giulio Muccioli (coord.)	[FR] [q2] [0h +105h] [3 Credits] ⊕
○ WFARM1231	<a href="#">Organical chemistry of drugs</a> ■	Mohamed Ayadim Raphaël Frédéric (coord.)	[FR] [q1+q2] [45h +120h] [10 Credits] ⊕ > English- friendly
○ WFARM1221	<a href="#">Biochemistry and molecular biology</a> ■	Nathalie Delzenne (coord.) Frédéric Lemaigre Joseph Lorent	[FR] [q1] [75h +37.5h] [10 Credits] ⊕

**o De la cellule végétale à la cellule animale, des tissus à l'être humain**

○ WFARM1212	<a href="#">Eléments de physiologie générale</a> ■	Olivier Feron	[FR] [q1] [15h +7.5h] [2 Credits] ⊕ > English- friendly
○ WFARM1213	<a href="#">Human physiology and basics of physiopathology</a> ■	Olivier Feron (coord.) Emmanuel Hermans Philippe Lysy	[FR] [q2] [60h] [6 Credits] ⊕ > English- friendly
○ WFARM1282	<a href="#">General microbiology</a> ■	Thomas Michiels	[FR] [q1] [20h +15h] [3 Credits] ⊕

**o Du médicament**

○ WFARM1232	<a href="#">General Pharmacology</a> ■	Emmanuel Hermans	[FR] [q1] [15h +7.5h] [2 Credits] ⊕
○ WFARM1237	<a href="#">Introduction botanique à la pharmacognosie 1re partie</a> ■	Stephan Declercq Muriel Quinet (coord.)	[FR] [q1] [22.5h +15h] [3 Credits] ⊕
○ WFARM1238	<a href="#">Introduction botanique à la pharmacognosie 2e partie</a> ■	Joëlle Leclercq (coord.) Muriel Quinet (coord.)	[FR] [q2] [22.5h +15h] [3 Credits] ⊕

## ⌘ Additional module in Pharmacy

### ○ Deuxième bloc annuel de bachelier

○ LANGL1855	Medical English 🟡	Timothy Byrne (coord.) Aurélie Deneumoustier Carlo Lefevre (coord.)	EN [q1 or q2] [30h] [3 Credits] 🌐
○ WFARM1219	Biophysics applied to the drugs 🟡	Bernard Gallez (coord.) Joseph Lorent	EN [q1] [30h +15h] [3 Credits] 🌐
○ WFARM1247	Statistical data processing 🟡	Eugen Pircalabelu	EN [q2] [15h +15h] [3 Credits] 🌐
○ WFARM1239	Computerized workshop and research on scientific information related to drugs. 🟡	Roberta Galdani (compensates Laure Bindels)	EN [q1] [5h +10h] [2 Credits] 🌐
○ WFARM1202	Eléments d'épidémiologie appliquée aux sciences pharmaceutiques et biomédicales 🟡	Marie Lambert (compensates Séverine Henrard)	EN [q2] [20h] [2 Credits] 🌐 > English- friendly
○ WFARM1290	Communication professionnelle en santé 🟡	Olivier Costa Muriel Rocour (coord.) Stephan Van den Broucke	EN [q2] [15h +10h] [2 Credits] 🌐

## ⌘ Approfondissement en sciences pharmaceutiques - recherche

### ○ Deuxième bloc annuel de bachelier

#### ○ Cours obligatoires

○ LANGL1855	Medical English 🟡	Timothy Byrne (coord.) Aurélie Deneumoustier Carlo Lefevre (coord.)	EN [q1 or q2] [30h] [3 Credits] 🌐
○ WFARM1219	Biophysics applied to the drugs 🟡	Bernard Gallez (coord.) Joseph Lorent	EN [q1] [30h +15h] [3 Credits] 🌐
○ WFARM1247	Statistical data processing 🟡	Eugen Pircalabelu	EN [q2] [15h +15h] [3 Credits] 🌐
○ WFARM1239	Computerized workshop and research on scientific information related to drugs. 🟡	Roberta Galdani (compensates Laure Bindels)	EN [q1] [5h +10h] [2 Credits] 🌐
○ WFARM1202	Eléments d'épidémiologie appliquée aux sciences pharmaceutiques et biomédicales 🟡	Marie Lambert (compensates Séverine Henrard)	EN [q2] [20h] [2 Credits] 🌐 > English- friendly
○ WFARM1290	Communication professionnelle en santé 🟡	Olivier Costa Muriel Rocour (coord.) Stephan Van den Broucke	EN [q2] [15h +10h] [2 Credits] 🌐

### ○ Minor or additional module

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.



**FARM1BA - 3RD ANNUAL UNIT**

- Mandatory
- ⊗ Optional
- △ Not offered in 2022-2023
- ⊖ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ 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 Majeure****o Des atomes, des molécules et des systèmes qui les régissent**

○ WFARM1312	<a href="#">Instrumental analysis applied to pharmaceutical sciences</a> ■	Marie-France Herent Giulio Muccioli (coord.)	FR [q1] [30h] [3 Credits] 🌐 > English- friendly
○ WFARM1313	<a href="#">Travaux pratiques d'analyse instrumentale</a> ■	Marie-France Herent Giulio Muccioli (coord.)	FR [q1] [0h +105h] [3 Credits] 🌐
○ WFARM1383	<a href="#">Génétique et biotechnologie pharmaceutiques</a> ■	Jean-François Collet Jean Baptiste Demoulin (coord.) Amandine Everard (compensates Laure Bindels) Sophie Lucas	FR [q2] [30h] [2 Credits] 🌐

**o De la cellule végétale à la cellule animale, des tissus à l'être humain**

○ WFARM1305	<a href="#">Elements of General Pathology</a> ■	Mélanie Dechamps Olivier Feron (coord.)	FR [q2] [30h] [3 Credits] 🌐 > English- friendly
○ WFARM1306	<a href="#">Medical microbiology</a> ■	Benoît Kabamba-Mukadi Hector Rodriguez- Villalobos (coord.) Alexia Verroken	FR [q1] [45h] [4 Credits] 🌐
○ WSBIM1334F	<a href="#">general immunology</a> ■	Sophie Lucas (coord.)	FR [q1] [35h] [3 Credits] 🌐 > English- friendly
○ WFARM1303	<a href="#">Clinical Chemistry</a> ■	Joseph Dewulf Catherine Fillee Damien Gruson Vincent Haufroid (coord.) Marie-Astrid van Dievoet	FR [q2] [20h] [2 Credits] 🌐

**o Du médicament**

○ WFARM1302	<a href="#">Pharmaceutical organic chemistry</a> ■	Raphaël Frédéric (coord.) Didier Lambert Séverine Ravez (compensates Raphaël Frédéric)	FR [q1+q2] [45h +30h] [6 Credits] 🌐 > English- friendly
○ WFARM1307	<a href="#">Physical pharmacy</a> ■	Tom Leyssens	FR [q2] [15h] [2 Credits] 🌐
○ WFARM1332	<a href="#">Pharmacologie générale, 2e partie</a> ■	Mireille Al Houayek Chantal Dessy (coord.)	FR [q1] [36h] [4 Credits] 🌐 > English- friendly

○ WFARM1324	Pharmacognosy 🟡	Joëlle Leclercq	FB [q1] [22.5h +15h] [3 Credits] 🌐 > English- friendly
○ WFARM1325	Pharmacognosie : plantes médicinales 🟡	Joëlle Leclercq	FB [q2] [22.5h +15h] [3 Credits] 🌐 > English- friendly
○ WFARM1300	Pharmacokinetics and metabolism of xenobiotics 🟡	Nathalie Delzenne 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 Giulio Muccioli (coord.) Stefanie Quennery Stéphanie Valentin	FB [q2] [7.5h] [5 Credits] 🌐
○ WFARM1349	Integrated Seminar in Pharmaceutical Sciences 🟡	Mireille Al Houayek (compensates Raphaël Frédérick) Emmanuel Hermans 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 🟡	Joëlle Leclercq	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
⌘ WFARM1359	Drug design en chimie pharmaceutique 🟡	Raphaël Frédérick (coord.) Didier Lambert Séverine Ravez (compensates Raphaël Frédérick)	FB [q2] [15h] [2 Credits] 🌐 > English- friendly
⌘ WFARM1369	Evaluation de la biodistribution et de l'effet d'un médicament par des méthodes non invasives 🟡	Bernard Gallez	FB [q2] [15h] [2 Credits] 🌐
⌘ WFARM1379	Seminars of Clinical Chemistry 🟡	Joseph Dewulf Catherine Fillee Damien Gruson (coord.) Vincent Haufroid Diane Maisin	FB [q2] [0h +30h] [2 Credits] 🌐

WFARM1370	Formation à la communication scientifique	Timothy Byrne (coord.) Olivia Dalleur Aurélie Deneumoustier	[q2] [15h +30h] [4 Credits]
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### Formation partielle à l'étranger (Erasmus)

L'étudiant autorisé à réaliser une partie de son parcours à l'étranger au 2<sup>e</sup> quadrimestre du 3<sup>e</sup> 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.

## Approfondissement en sciences pharmaceutiques - recherche

### Troisième bloc annuel de bachelier

Dans le cadre de la mineure d'approfondissement en sciences pharmaceutiques - recherche, l'étudiant est tenu de choisir l'une des deux possibilités suivantes. Un transfert vers le programme de l'approfondissement en sciences pharmaceutiques est toutefois possible.

WFARM1380	Stage d'immersion en recherche pharmaceutique		[q2] [7 Credits] > English-friendly
WFARM1311	Projet expérimental en sciences pharmaceutiques		[q2] [8 Credits] > English-friendly

### Formation partielle à l'étranger (Erasmus)

L'étudiant autorisé à réaliser une partie de son parcours à l'étranger au 2<sup>e</sup> quadrimestre du 3<sup>e</sup> 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.

### Minor or additional module

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.

## 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

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### 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](https://uclouvain.be/fr/etudier/inscriptions/examens-admission.html) (https://uclouvain.be/fr/etudier/inscriptions/examens-admission.html) 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

- To be eligible to apply to a bachelor's programme, holder of a non-belgian degree who do not have Belgian student status must also:
  - have earned a secondary school degree within the last three years;
  - not already hold a bachelor's degree; and,
- 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).
- For any secondary school diploma **from a European Union country**, the admission request must contain the equivalence of your diploma or, at the very least, proof of the filing of the equivalence request with the Wallonia-Brussels Federation (French Community of Belgium). For any information relating to obtaining an equivalence, please refer to [the following site](#).

- Not to have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2021-2022, you must have obtained your diploma during the academic years 2018-2019, 2019-2020 or 2020-2021. In the French Community of Belgium, the academic year runs from September 14 to September 13.[1\\_information/2021/common-bachelor/](#)

## Access based on validation of professional experience

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

## Special requirements to access some programmes

- Admission to **undergraduate studies in engineering: civil engineering and architect**

Pass certificate for the [special entrance examination for undergraduate studies in engineering: civil engineering and architect](https://uclouvain.be/fr/facultes/epl/examenadmission.html) (<https://uclouvain.be/fr/facultes/epl/examenadmission.html>).

Admission to these courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.

- Admission to **undergraduate studies in veterinary medicine**

[Admission to undergraduate studies in veterinary medicine is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

- Admission to **undergraduate studies in physiotherapy and rehabilitation**

[Admission to undergraduate studies in physiotherapy and rehabilitation is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html). (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>)

- Admission to **undergraduate studies in psychology and education: speech and language therapy**

[Admission to undergraduate studies in psychology and education: speech and language therapy is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

- Admission to **undergraduate studies in medicine and dental science**

[Admission to undergraduate studies in medicine and dental science is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html). (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>)

Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit [an aptitude test \(fr\)](https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

## Specific professional rules

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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

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The training provided in the Bachelor in Pharmacy programme is based on a variety of teaching methods enabling an integrated approach to the theoretical and practical aspects of the different disciplines with regard to medication.

The theory courses are aimed at developing a specialised knowledge base, using practical examples illustrating the complexity of pharmacy. Most of the theory courses are also associated with practical laboratory work, exercises and seminars during which the students are actively engaged in their training.

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.

Finally, through work placements in a professional environment, the Bachelor in Pharmacy training enables the students to discover for themselves the various aspects of the pharmacist's job. 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

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***The evaluation methods comply with the regulations concerning studies and exams (<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".***

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.

## Possible trainings at the end of the programme

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Positioning of the programme within the University cursus

The bachelor's degree entitles access to the master's of Pharmaceutical Sciences. Complementary masters with a professional vocation are organised in the practice of industrial pharmacy, clinical biology, hospital pharmacy, clinical hospital pharmacy, pharmaceutical technology.

Other studies accessible upon completion of the programme

Other masters within the Faculty of Medicine, as well as some programmes from other faculties, may be accessible subject to certain prerequisites.

## Contacts

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### Curriculum Management

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: <a href="tel:+3227647360">+32 (0)2 764 73 60</a>

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- Bernard Gallez
- Giulio Muccioli

Useful Contact(s)

- Fabienne Titeux
- Personne de contact des 2e et 3e années de bachelier: [secretariat-farm@uclouvain.be](mailto:secretariat-farm@uclouvain.be)
- Delphine Delhayé
- Giulio Muccioli

