UCLouvain

SBIM2M1

2026 - 2027

Master [60] in Biomedicine

At Bruxelles Woluwe - 60 credits - 1 year - Day schedule - In French
Dissertation/Graduation Project : **YES** - Internship : **optional**
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: **SBIM2M1** - Francophone Certification Framework: 7

Table of contents

Introduction 2
Teaching profile 3
Learning outcomes 3
Programme structure 3
Programme 4
Detailed programme by subject 4
Supplementary classes 16
The programme's courses and learning outcomes 18
Information 19
Access Requirements 19
Teaching method 21
Evaluation 21
Mobility and/or Internationalisation outlook 21
Possible trainings at the end of the programme 21
Contacts 21

SBIM2M1 - Introduction

Introduction

SBIM2M1 - Teaching profile

Learning outcomes

The programme of the 60 credit Master is open to any students who wish to undergo additional training in biomedical sciences without having to do the two years of the full Master.

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

1 Use integrated and evolving knowledge in biomedical sciences

1.a Use general knowledge and methodologies in experimental biomedical sciences: normal and pathological biochemistry and molecular biology, cell biology, general and special histology, general anatomy, general and special physiology.
1.b Understand and criticize the experimental approaches and observation methods that led to this knowledge.
1.c Master the modern sources of knowledge and be able to effectively search for new and specific information, and criticize it.

2

Analyze, criticize, and propose perspectives of experiments in biomedical sciences

2.a

Analyze the observations in a rigorous and critical way:

Ea:

- develop analogical and deductive reasoning;

- establish links of correlation and causality;

- track down and correct logic errors.

2.b

Interpret and represent experimental results through mathematical modeling, graphical representations, reasoning and statistical tools:

Ea:

- exploit the dispersion of continuous variables as a source of information.

2.c Exploit the results of biological or clinical analyzes recorded in databases.
2.d Demonstrate creativity, recognizing failures and seeking the cause; recognizing unexpected observations and identifying their interest; by reformulating initial hypotheses, by elaborating new hypotheses.

3

Communicate both orally and in writing

3.a Enrich his vocabulary in biomedical sciences and use it accurately and nuanced in French and scientific English.
3.b

Write, in French and in English, scientific reports based on the standards of scientific publication in the biomedical sciences:

Ea:

- to argue the relevance of the experimental procedures and the proposed conclusions;

- to compare the data with those of comparable studies published in the scientific literature;

- to identify possible divergences between different studies, to propose the possible causes.

3.c Present oral communication in accordance with scientific standards in the biomedical sciences.

4 Be a professional researcher to start a scientific career

4.a Be a professional researcher to start a scientific career
4.b

Practice scientific integrity:

Ea:

- consider all available data, including those that do not support the advanced hypothesis;

- cite his sources and ban plagiarism.

4.c Develop scientific curiosity and participate in the dissemination of knowledge built on rigorous scientific data

Programme structure

The contents of the programme are determined according to the background and the project of each student.

It is made up of :
- 15 credits devoted to the dissertation,
- 17 credits of basic biomedical sciences,

- 2 credits for religious,
- 20 credits for option courses,
- 6 credits for optional subjects.

SBIM2M1 Programme

Detailed programme by subject

CORE COURSES [40.0]

- O Mandatory
- ⊠ Optional
- △ Not offered in 2026-2027
- ⊘ Not offered in 2026-2027 but offered the following year
- ⊕ Offered in 2026-2027 but not the following year
- △ ⊕ Not offered in 2026-2027 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 Mémoire (17 credits)

O WSBIM2061	Biomedical sciences dissertation support seminar	Charles De Smet	FR [q2] [12h] [2 Credits] > *English-friendly*
O WSBIM2060	Bibliographic dissertation in biomedical sciences	Charles De Smet (coord.)	FR [] [] [15 Credits] > *English-friendly*

O Formation aux sciences de base en sciences biomédicales (13 credits)

O WSBIM2114	Analysis of gene expression and function	Roberta Gualdani Frédéric Lemaigre Nisha Limaye Thomas Michiels Donatienne Tyteca (coord.)	EN [q1] [39h] [4 Credits]
O WSBIM2115	Protein structure / Function relationships	Luc Bertrand Guido Bommer (coord.) Jean-François Collet Géraldine Laloux	EN [q1] [30h] [3 Credits]
O WSBIM2280	Scientific communication workshop	Luc Bertrand Cyril Corbet Charles De Smet (coord.) Roberta Gualdani Nisha Limaye Alice Marino	EN [q1] [30h] [3 Credits]
O WFARM2104	GOOD MANUFACTURING AND QUALITY	Thierry Pronce Quentin Spillier (coord.)	FR [q2] [30h+15h] [3 Credits] > *English-friendly*

O Sciences religieuses (2 credits)

L'étudiant choisit un cours parmi les suivants :

⊠ LTECO2101	Health, spirituality and religion : A. Biblical and clinical readings	Claude Lichtert	FR [q1] [15h] [2 Credits]
⊠ LTECO2102	Health, spirituality and religion : B. Spiritual care in medicine	Serena Buchter Marcela Lobo Bustamante	FR [q1] [15h] [2 Credits]
⊠ LTECO2103	Health, spirituality and religion : C. Science, ethics and religion	Aurélien Chukurian	FR [q1] [15h] [2 Credits]

Cours au choix (8 credits)

L'étudiant choisit au minimum 8 crédits de cours dans l'ensemble du programme de Master 120 en sciences biomédicales. Sous condition de l'accord du responsable de programme et du promoteur du mémoire, l'étudiant peut éventuellement choisir les activités de Work placement (WSBIM2272) ou Research placement (WSBIM2273).

OPTIONS

> Option pathophysiologie cellulaire et moléculaire *[en-prog-2026-sbim2m1-wsbim904o]*
> Option neurosciences *[en-prog-2026-sbim2m1-wsbim907o]*
> Option cancérologie *[en-prog-2026-sbim2m1-wsbim908o]*
> Option toxicologie *[en-prog-2026-sbim2m1-wsbim935o]*
> Option sciences biomédicales cliniques *[en-prog-2026-sbim2m1-wsbim936o]*
> Option nutrition humaine *[en-prog-2026-sbim2m1-wsbim937o]*

OPTION PATHOPHYSIOLOGIE CELLULAIRE ET MOLÉCULAIRE [20.0]

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Content:

Programme des étudiants inscrits en master 60

L'étudiant suit les 17 crédits des cours obligatoires et choisit un des deux cours sur la thématique du Développement durable et Transition:

WSBIM2215	Post-translational regulation of proteins	Luc Bertrand (coord.) Guido Bommer Jean-François Collet Jean Baptiste Demoulin	FR [q1] [20h] [2 Credits] *> English-friendly*
WSBIM2141P	Intercellular signaling and tumor biology - Intercellular signaling and tumor biology (part)		FR [q1] [20h] [2 Credits] *> English-friendly*
WSBIM2185	Cellular and molecular pathophysiology of human diseases	Luc Bertrand Cyril Corbet Laure Dumoutier Patrick Henriet Sandrine Horman Jean-Christophe Jonas (coord.) Pietro Maggi	FR [q1] [30h] [3 Credits]
WSBIM2285	Biomedical project design, Pathophysiology	Mohamad Assi Frédéric Lemaigre (coord.)	FR [q2] [30h] [4 Credits]
WSBIM2116	Maladies inflammatoires, auto-immunitaires et cancer: aspects immunologiques	Laure Dumoutier (coord.) Sophie Lucas Jean-Christophe Renauld Julie Stockis Nathalie Vigneron	FR [q1] [30h] [3 Credits] *> English-friendly*
WFARM2149	Pharmaceutical approach in nutrition	Nathalie Delzenne	FR [q2] [30h+15h] [3 Credits] *> English-friendly*
WFARM1375	Drugs and sustainable development	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
LBIR2050A	Challenges of sustainable development and transition	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]

Programme des étudiants inscrits en master 120

Cours obligatoires

O WSBIM2285	Biomedical project design, Pathophysiology	Mohamad Assi Frédéric Lemaigre (coord.)	FR [q2] [30h] [4 Credits]
O WSBIM2218	Special issues in molecular and cellular pathophysiology	Christiani Andrade Amorim Luc Bertrand Cyril Corbet Chantal Dessy Laure Dumoutier Antoine Froidure Bernard Hanseeuw Patrick Henriet Sandrine Horman Jean-Christophe Jonas (coord.) Shakeel Kautbally Pietro Maggi Julie Stockis	EN [q2] [30h] [3 Credits]

O Cours au choix dans le domaine du Développement durable et la Transition
L'étudiant choisit un des deux cours suivants en 2e bloc annuel du cycle de master:

⊠ LBIR2050A	Challenges of sustainable development and transition	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]
⊠ WFARM1375	Drugs and sustainable development	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	EN [q2] [10h+20h] [3 Credits]

O Cours au choix
L'étudiant choisit 10 crédits parmi les unités d'enseignement ci-dessous.

⊠ WSBIM2215	Post-translational regulation of proteins	Luc Bertrand (coord.) Guido Bommer Jean-François Collet Jean Baptiste Demoulin	FR [q1] [20h] [2 Credits] *> English-friendly*
⊠ WSBIM2141P	Intercellular signaling and tumor biology - Intercellular signaling and tumor biology (part)		EN [q1] [20h] [2 Credits] *> English-friendly*
⊠ WSBIM2181	Molecular and cellular aspects of nutrition	Patrice Cani (coord.) Matthias Van Hul Maria Veiga da Cunha	FR [q1] [30h] [4 Credits]
⊠ WSBIM2185	Cellular and molecular pathophysiology of human diseases	Luc Bertrand Cyril Corbet Laure Dumoutier Patrick Henriet Sandrine Horman Jean-Christophe Jonas (coord.) Pietro Maggi	EN [q1] [30h] [3 Credits]
⊠ WSBIM2116	Maladies inflammatoires, auto-immunitaires et cancer: aspects immunologiques	Laure Dumoutier (coord.) Sophie Lucas Jean-Christophe Renauld Julie Stockis Nathalie Vigneron	FR [q1] [30h] [3 Credits] *> English-friendly*
O WSBIM2126	Artificial Intelligence for Biomedical Sciences		EN [q1] [30h+10h] [3 Credits] *> French-friendly*
⊠ WSBIM2229	Interdisciplinary program in translational medicine *Ce programme interuniversitaire est financé par le Fond Baillet Latour. Plus de renseignements sur le site .* *L'intégration de ce cours dans votre PAE sera hors progression. Les crédits acquis n'entreront pas en considération dans l'acquisition des 120 crédits obligatoires pour l'obtention de votre diplôme de master.*		EN [q2] [50h] [5 Credits]

OPTION NEUROSCIENCES [20.0]

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Content:

WSBIM2154	Neuroanatomy and anatomo-functional imaging techniques	John Lee Marcus Missal (coord.)	FR [q1] [30h] [4 Credits]
WSBIM2155	Developmental neurobiology	Ayse Dereli Pascal Kienlen-Campard (coord.) Nuria Suelves Caballol	FR [q1] [30h] [4 Credits]
WSBIM2156	Animal and human electrophysiology project	Philippe Gailly (coord.) Marcus Missal André Mouraux	EN [q1] [20h] [2 Credits]
WSBIM2126	Artificial Intelligence for Biomedical Sciences		EN [q1] [30h+10h] [3 Credits] *> French-friendly*
WSBIM2251	Theoretical Approaches in Neurosciences *Ce cours doit être choisi par les étudiants inscrits au master 120.*	John Lee Marcus Missal (coord.)	EN [q2] [20h+10h] [3 Credits] *> French-friendly*
WSBIM2253	Advanced issues in cognitive neuroscience *Ce cours doit être choisi par les étudiants inscrits au master 120.*	Julie Duque Valéry Legrain Marcus Missal (coord.)	EN [q2] [30h+0h] [4 Credits]
WSBIM2255	Seminar on neurological and psychiatric disease *Ce cours doit être choisi par les étudiants inscrits au master 120.*	Philippe de Timary Riëm El Tahry Bernard Hanseeuw Emmanuel Hermans (coord.) Marie-Cécile Nassogne	EN [q2] [30h] [3 Credits]
WFARM1375	Drugs and sustainable development *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
LBIR2050A	Challenges of sustainable development and transition *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]
WSBIM2229	Interdisciplinary program in translational medicine *Ce cours ne peut être choisi que par les étudiants inscrits au master 120. Ce programme interuniversitaire est financé par le Fond Baillet Latour. Plus de renseignements sur le site .* *L'intégration de ce cours dans votre PAE sera hors progression. Les crédits acquis n'entreront pas en considération dans l'acquisition des 120 crédits obligatoires pour l'obtention de votre diplôme de master.*		EN [q2] [50h] [5 Credits]

OPTION CANCÉROLOGIE [20.0]

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Content:

WSBIM2141	Intercellular signaling and tumor biology	Stefan Constantinescu Anabelle Decottignies Olivier Feron Frédéric Lemaigre (coord.) Pierre Sonveaux Nicolas Tajeddine (compensates Frédéric Lemaigre)	FR [q1] [30h] [3 Credits] > English-friendly
WSBIM2142	Tumor genetics and epigenetics	Charles De Smet Jean Baptiste Demoulin (coord.) Violaine Havelange	FR [q1] [20h] [2 Credits] > English-friendly
WSBIM2143	Causes and risk factors for cancer *L'étudiant de la finalité toxicologie doit choisir un autre cours pour une valeur de 2 crédits.*	Paméla Baldin Laure Bindels Nilmara De Oliveira Alves Brito François Huaux Nick van Gastel (coord.)	FR [q1] [15h] [2 Credits] > French-friendly
WSBIM2144	Cancer diagnosis and therapy	Jean-François Baurain Bernard Gallez Vincent Grégoire Violaine Havelange Frédéric Lecouvet Sophie Lucas (coord.) Etienne Marbaix	FR [q1] [30h] [3 Credits] > English-friendly
WSBIM2244	Special issues in cancerology *Ce cours doit être choisi par les étudiants inscrits au master 120.*	Jean-François Baurain Laure Bindels Charles De Smet (coord.) Olivier Feron Bernard Gallez Etienne Marbaix Pierre Sonveaux Nick van Gastel Nathalie Vigneron (compensates Jean Baptiste Demoulin)	FR [q2] [50h] [5 Credits]
WSBIM2245	In-session seminar in biomedicine *Ce cours doit être choisi par les étudiants inscrits au master 120.*	Jean-François Baurain Laure Bindels Charles De Smet (coord.) Jean Baptiste Demoulin (coord.) Olivier Feron Bernard Gallez Etienne Marbaix Pierre Sonveaux Nick van Gastel	FR [q2] [50h] [5 Credits]
WSBIM2126	Artificial Intelligence for Biomedical Sciences		EN [q1] [30h+10h] [3 Credits] > French-friendly
WFARM1375	Drugs and sustainable development *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
LBIR2050A	Challenges of sustainable development and transition *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]

⛒ WSBIM2229	Interdisciplinary program in translational medicine *Ce cours ne peut être choisi que par les étudiant inscrits en master 120. Ce programme interuniversitaire est financé par le Fond Baillet Latour. Plus de renseignements sur le site .* *L'intégration de ce cours dans votre PAE sera hors progression. Les crédits acquis n'entreront pas en considération dans l'acquisition des 120 crédits obligatoires pour l'obtention de votre diplôme de master.*		[q2] [50h] [5 Credits]

OPTION TOXICOLOGIE [20.0]

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Content:

Cours obligatoires

WSBIM2290	Introduction to laboratory animal science	Ingrid Dubois Vedrenne	FR [q1] [37h] [3 Credits]
WSBIM2137	Nutrition and environment: biological and toxicological aspects	Laure Bindels Philippe de Timary Cathy Debier Nathalie Delzenne (coord.) Amandine Everard	FR [q1] [30h] [4 Credits] *> English-friendly*

Cours au choix

L'étudiant choisit minimum 3 crédits parmi les cours suivants.

WFARM1303	Clinical Chemistry	Joseph Dewulf Catherine Fillee Damien Gruson Vincent Haufroid (coord.) Madeleine Rousseaux	FR [q2] [20h] [2 Credits]
WFARM2180	Organotoxicity : molecular, cellular and functional aspects	Olivier Feron (coord.) Philippe Lysy Xavier Wittebole	FR [q2] [30h+15h] [3 Credits] *> English-friendly*
WFARM2514	Drug dependence and addiction	Laure Bindels Lidvine Boland Philippe de Timary Sophie Gohy Vincent Haufroid Emmanuel Hermans (coord.) Denis Jacques Didier Lambert Peter Starkel Miikka Vikkula Xavier Wittebole	FR [q2] [22.5h] [3 Credits]
WSBIM1200	Biomedical instrumental analysis and radiation protection	Giulio Muccioli	FR [q1] [30h+30h] [4 Credits] *> English-friendly*
WFARM1312T	Instrumental analysis applied to pharmaceutical sciences - Instrumental analysis applied to pharmaceutical sciences (chromatographic technique and 10h of practical work)		FR [q1] [20h+10h] [4 Credits] *> English-friendly*
WFARM2266	Analysis of biotechnology drugs	Laure Bindels Giulio Muccioli (coord.)	FR [q1] [22.5h] [3 Credits] *> English-friendly*
WSBIM2126	Artificial Intelligence for Biomedical Sciences		EN [q1] [30h+10h] [3 Credits] *> French-friendly*
WFARM1375	Drugs and sustainable development *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
LBIR2050A	Challenges of sustainable development and transition *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne Valérie Swaen	EN [q1 or q2] [15h+7.5h] [3 Credits]

Stage obligatoire au choix (10 credits)

L'étudiant inscrit au Master 120 choisit un stage parmi les trois suivants. L'étudiant inscrit au Master 60 remplace ces activités de l'option par tout autre cours proposé dans les finalités et les options de master en sciences biomédicales.

⛒ WSBIM2271	International research internship		EN [q2] [] [10 Credits]
⛒ WSBIM2272	Work placement		EN [q2] [] [10 Credits]
⛒ WSBIM2273	Research placement		EN [q2] [] [10 Credits]

OPTION SCIENCES BIOMÉDICALES CLINIQUES [20.0]

- O Mandatory
- ⊠ Optional
- △ Not offered in 2026-2027
- ⊘ Not offered in 2026-2027 but offered the following year
- ⊕ Offered in 2026-2027 but not the following year
- △ ⊕ Not offered in 2026-2027 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 Content:

O Métabolisme et pathologies particulières

O WSBIM2230	Biochemistry of inborn errors of metabolism	Joseph Dewulf (coord.) Marie-Cécile Nassogne	FR [q1] [30h] [3 Credits]
O WSBIM2246	Clinical toxicology	Caroline Dahlqvist Nilmara De Oliveira Alves Brito Bénédicte Delire Laure Elens (coord.) Antoine Froidure Sophie Gohy Ludovic Gérard Marie-Cécile Nassogne Alexis Wérion	FR [q1] [30h+5h] [4 Credits]

O Pathologie humaine

Students from the master 60 who choose this option in Clinical biomedical sciences will be offered two other courses of human pathology in agreement with their program manager

O WMDS1330T	Pathologie générale - (partim théorie)		FR [q2] [36h] [3 Credits]
O WFARM2104	GOOD MANUFACTURING AND QUALITY	Thierry Pronce Quentin Spillier (coord.)	FR [q2] [30h+15h] [3 Credits] > *English-friendly*

O Méthodes pour les études cliniques

L'étudiant inscrit au master 60 doit choisir en lieu et place du cours LSTAT2330 un cours sur la thématique du Développement durable et de la Transition, au choix ci-dessous

O WESP2123	Principles of clinical trials	Diego Castanares Zapatero (coord.) Xavier Stephenne	FR [q1] [20h+10h] [4 Credits]
⊠ LSTAT2330	Statistics in clinical trials. *Ce cours est obligatoire pour les étudiants inscrits au master 120.*	Catherine Legrand	FR [q2] [30h+7.5h] [3 Credits]
⊠ WFARM1375	Drugs and sustainable development *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
⊠ LBIR2050A	Challenges of sustainable development and transition *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]

⊠ Autre activité

Selon son projet, l'étudiant inscrit au Master 120 peut remplacer des activités obligatoires de l'option par le stage Work Placement (WSBIM2272). Son programme d'année sera adapté en conséquence. Ce choix d'activité dans l'option ne concerne pas les étudiants inscrits au Master 60.

⊠ WSBIM2272	Work placement		EN [q2] [] [10 Credits]

OPTION NUTRITION HUMAINE [20.0]

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Content:

Cours au choix

Pour compléter l'option, l'étudiant choisit des cours pour un nombre de crédits permettant d'atteindre les minimum 20 crédits d'option. Pour les étudiants du master 120, si certains cours que choisit l'étudiant sont offerts dans une finalité spécialisée, le recouvrement, entre les cours de cette option et les cours d'une finalité spécialisée, ne peut excéder 6 crédits.

Cours au choix (10 credits)

L'étudiant choisit des cours pour atteindre un minimum de 10 crédits, parmi les cours proposés dans la liste ci-dessous, complétés de cours proposés dans tout autre programme de la faculté. Ce choix sera validé par la commission d'enseignement de la finalité.

WSBIM2230	Biochemistry of inborn errors of metabolism	Joseph Dewulf (coord.) Marie-Cécile Nassogne	EN [q1] [30h] [3 Credits]
WSBIM2290	Introduction to laboratory animal science	Ingrid Dubois Vedrenne	FR [q1] [37h] [3 Credits]
WFARM2149	Pharmaceutical approach in nutrition	Nathalie Delzenne	FR [q2] [30h+15h] [3 Credits] *> English-friendly*
WSBIM2142	Tumor genetics and epigenetics	Charles De Smet Jean Baptiste Demoulin (coord.) Violaine Havelange	FR [q1] [20h] [2 Credits] *> English-friendly*
WSBIM2143	Causes and risk factors for cancer	Paméla Baldin Laure Bindels Nilmara De Oliveira Alves Brito François Huaux Nick van Gastel (coord.)	EN [q1] [15h] [2 Credits] *> French-friendly*
WSBIM2144	Cancer diagnosis and therapy	Jean-François Baurain Bernard Gallez Vincent Grégoire Violaine Havelange Frédéric Lecouvet Sophie Lucas (coord.) Etienne Marbaix	FR [q1] [30h] [3 Credits] *> English-friendly*
WSBIM2126	Artificial Intelligence for Biomedical Sciences		EN [q1] [30h+10h] [3 Credits] *> French-friendly*
WFARM1375	Drugs and sustainable development *Ce cours ne peut être choisi que par les étudiants inscrits en master 60*	Nathalie Delzenne (coord.) Raphaël Frédérick Pauline Modrie Anne Spinewine Sandy Tubeuf Françoise Van Bambeke	FR [q2] [10h+20h] [3 Credits]
LBIR2050A	Challenges of sustainable development and transition *Ce cours ne peut être choisi que par les étudiants inscrits en master 60.*	Nathalie Delzenne Valérie Swaen	FR [q1 or q2] [15h+7.5h] [3 Credits]

Stage obligatoire au choix (10 credits)

L'étudiant inscrit au Master 120 choisit un stage parmi les suivants. L'étudiant inscrit au Master 60 remplace ces activités de l'option par tout autres cours proposés dans les finalités et les options de master en sciences biomédicales.

WSBIM2271	International research internship		EN [q2] [] [10 Credits]
WSBIM2272	Work placement		EN [q2] [] [10 Credits]
WSBIM2273	Research placement		EN [q2] [] [10 Credits]

Supplementary classes

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

- O Mandatory
- ⊠ Optional
- △ Not offered in 2026-2027
- ⊘ Not offered in 2026-2027 but offered the following year
- ⊕ Offered in 2026-2027 but not the following year
- △ ⊕ Not offered in 2026-2027 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...)

From 15 to 60credit(s)

O WFARM1221S	Biochemistry and molecular biology		FR [q1] [50h+10h] [6 Credits] 🌐
O WFARM1213	Human physiology and basics of physiopathology	Olivier Feron (coord.) Emmanuel Hermans Manuel Johanns	FR [q2] [60h] [6 Credits] 🌐 *> English-friendly*
O WMDS1230	Biologie cellulaire médicale et expérimentale	Stefan Constantinescu (coord.) Christophe Pierreux Donatienne Tyteca	FR [q1] [30h+20h] [4 Credits] 🌐
O LANGL2454	English for biomedical students	Nicholas Gibbs Nevin Serbest (coord.)	EN [q2] [30h] [3 Credits] 🌐
O WSBIM1334	general immunology	Isabelle Leclercq Sophie Lucas (coord.) Christophe Pierreux Jean-Christophe Renauld	FR [q1] [65h] [6 Credits] 🌐 *> English-friendly*
O WSBIM1103	Cytology and general Histology	Christophe Pierreux	FR [q2] [10h+40h] [6 Credits] 🌐
O WFARM1282	General microbiology	Thomas Michiels	FR [q1] [20h+15h] [3 Credits] 🌐
O WSBIM1226	Molecular biology (including epigenetics) and tutorials	Charles De Smet Frédéric Lemaigre Thomas Michiels (coord.)	FR [q1] [30h+10h] [3 Credits] 🌐
O WSBIM1320	Introduction to experimental approaches in cellular and molecular biology	Luc Bertrand Anne des Rieux Sandrine Horman Donatienne Tyteca (coord.)	FR [q2] [30h] [3 Credits] 🌐
O WMDS1237D	Pharmacologie générale (partim sciences dentaires)		FR [q1] [20h] [2 Credits] △ 🌐
O WSBIM1302	Molecular Virology	Thomas Michiels	FR [q1] [25h] [3 Credits] 🌐
O WSBIM1382	Genetics and applied biotechnology	Luc Bertrand (coord.) Laure Dumoutier Géraldine Laloux Nisha Limaye	FR [q1] [30h] [3 Credits] 🌐 *> English-friendly*
O WSBIM1211	Methodolgy of cell and molecular biology	Guido Bommer Jean-François Collet (coord.) Stefan Constantinescu Pauline Leverrier Donatienne Tyteca	FR [q2] [22.5h] [3 Credits] 🌐
O WFARM1305	Elements of General Pathology	Mélanie Dechamps Olivier Feron (coord.)	FR [q2] [30h] [3 Credits] 🌐 *> English-friendly*
O WFARM1247	Statistical data processing	Eugen Pircalabelu	FR [q2] [15h+15h] [3 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.

SBIM2M1 - Information

Access Requirements

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

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

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed in this table or 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
- > University Bachelors
- > Non university Bachelors
- > Holders of a 2nd cycle University degree
- > Holders of a non-University 2nd cycle degree
- > Access based on validation of professional experience
- > Access based on application
- > Admission and Enrolment Procedures for general registration

University Bachelors

Diploma	Special Requirements	Access	Remarks
UCLouvain Bachelors			
Bachelor in Biomedicine		Direct access	
Bachelor in Dentistry Bachelor in Medecine Bachelor in Pharmacy		Access with additional training	Additional requirements for admission de max 15 crédits intégrés dans le programme du master
Bachelor in Veterinary Medicine Bachelor in Chemistry Bachelor in Physics Bachelor in Bioengineering		Access based on application	Additional requirements for admission de max 60 crédits intégrés dans le programme du master
Others Bachelors of the French speaking Community of Belgium			
bachelier en sciences biomédicales		Direct access	
bachelier en médecine sciences pharmaceutiques sciences dentaires		Access with additional training	Additional requirements for admission de max 15 crédits intégrés dans le programme du master
Bachelier en médecine vétérinaire Bachelier en sciences chimiques Bachelier en sciences de l'ingénieur orientation bioingénieur Bachelier en sciences physiques		Access based on application	Additional requirements for admission de max 60 crédits intégrés dans le programme du master
Bachelors of the Dutch speaking Community of Belgium			
bachelor of Science in de biomedische wetenschappen		Direct access	
bachelor of Science in de geneeskunde bachelor of Science in de farmaceutische wetenschappen bachelor of Science in de tandheelkunde		Access with additional training	Additional requirements for admission de max 15 crédits intégrés dans le programme du master
bachelor of Science in de diergeneeskunde bachelor of Science in de chemie bachelor of Science in de bio-ingenieurswetenschappen		Access based on application	Additional requirements for admission de max 60 crédits intégrés dans le programme du master

bachelor of Science in de fysica		
Foreign Bachelors		
diplôme universitaire jugé équivalent dans des domaines autres que ceux repris ci-dessus ou ayant acquis une expérience pouvant être valorisée dans le domaine des sciences biomédicales	Access based on application	Additional requirements for admission de max 60 crédits intégrés dans le programme du master

Non university Bachelors

> Find out more about links to the university

Diploma	Access	Remarks
BA - sage-femme - crédits supplémentaires entre 15 et 30 BA - technologue de laboratoire médical - crédits supplémentaires entre 30 et 60 BA - technologue en imagerie médicale - crédits supplémentaires entre 30 et 60 BA : infirmier responsable de soins généraux - crédits supplémentaires entre 15 et 30 BA de spécialisation en anesthésie - crédits supplémentaires entre 15 et 30 BA de spécialisation en soins intensifs et aide médicale urgente - crédits supplémentaires entre 15 et 30 BA en chimie, orientation biochimie - crédits supplémentaires entre 30 et 60 BA en chimie, orientation biotechnologie - crédits supplémentaires entre 30 et 60 BA en chimie, orientation chimie appliquée - crédits supplémentaires entre 30 et 60 BA en chimie, orientation environnement - crédits supplémentaires entre 30 et 60 BA en diététique - crédits supplémentaires entre 30 et 60 BA en ergothérapie - crédits supplémentaires entre 30 et 60 BA en soins infirmiers - crédits supplémentaires entre 30 et 60 BA en soins infirmiers pour titulaires d'un brevet d'infirmier hospitalier - crédits supplémentaires entre 30 et 60	Les enseignements supplémentaires éventuels peuvent être consultés dans le module complémentaire .	Type court

Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			
		Direct access	
Masters			
Master [120] in Biochemistry and Molecular and Cell Biology		Access with additional training	
Master [120] in Pharmacy		Access based on application	

Holders of a non-University 2nd cycle degree

Access based on validation of professional experience

It is possible, under certain conditions, to use one's personal and professional experience to enter a university course without having the required qualifications. However, validation of prior experience does not automatically apply to all courses. Find out more about Validation of priori experience .

Access based on application

Access based on application : access may be granted either directly or on the condition of completing additional courses of a maximum of 60 ECTS credits, or refused.

Admission and Enrolment Procedures for general registration

Teaching method

The teaching methods used in the Master programme place the student in active learning situations with a balanced mix of group and individual work.

In addition, there will be a variety of different teaching methods : lectures, exercise sessions, problem solving activities, assignments to be done in individually or in small groups etc.

The dissertation, directed by a supervisor, enables students to acquire skills in the critical analysis of the literature.

Evaluation

The evaluation methods comply with the Academic regulations and procedures . More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

For the theoretical courses, there are traditional written or oral examinations.

Fifteen credits are devoted to the dissertation : this is assessed on the basis of the submission of piece of written work which must be defended before a panel of experts.

Mobility and/or Internationalisation outlook

Foreign students may join the 60 credit Master on the basis of prerequisite subjects approved by the programme committee.

Possible trainings at the end of the programme

120 credit Masters :

By the end of this year of training, graduates of the 60 credit Master in Biomedical Sciences may move on to the teaching qualification for higher secondary education.

Links with teaching qualification (l'agrégation de l'enseignement secondaire supérieur - AESS) : the only university training directly accessible to holders of the 60 credit Master is the teaching qualification for higher secondary education (30 credits).

Contacts

Curriculum Management

Entity

Structure entity	SSS/FASB/SBIM
Denomination	(SBIM)
Faculty	Faculty of Pharmacy and Biomedical Sciences (FASB)
Sector	Health Sciences (SSS)
Acronym	SBIM
Postal address	Avenue Mounier 73 - bte B1.73.04 1200 Woluwe-Saint-Lambert Tel: +32 (0)2 436 22 08 - Fax: +32 (0)2 764 73 63

Other academic Supervisor(s)

- charles.desmet@uclouvain.be

Jury

- Président du jury Master 60: charles.desmet@uclouvain.be
- Secrétaire du jury Master 60: laurent.gatto@uclouvain.be

Useful Contact(s)

- Secrétariat de l'école des sciences biomédicales: guillaume.arnould@uclouvain.be
- Conseiller aux études: luc.bertrand@uclouvain.be
- Président de la commission d'enseignement de l'école de sciences biomédicales: charles.desmet@uclouvain.be