UCLouvain

SBIM2M1

2024 - 2025

Master [60] in Biomedicine

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

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;

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).

O WSBIM2284	Cellular and molecular pathophysiology of human diseases (Part 2) *Ce cours ne sera plus donné en 2025-2026 ; à la place, l'étudiant.e aura le choix entre 3 cours en lien avec le Développement durable et la transition (LBIR2050A, WFARM1375 et WSBIM2139)*	Christiani Andrade Amorim Luc Bertrand Cyril Corbet Chantal Dessy Laure Dumoutier Patrick Henriet Sandrine Horman Jean-Christophe Jonas (coord.)	EN [q2] [10h+20h] [3 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

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	EN [q1] [20h] [2 Credits] *> English-friendly*
⊠ WSBIM2141P	Intercellular signaling and tumor biology - Intercellular signaling and tumor biology (part)	Frédéric Lemaigre (coord.)	EN [q1] [20h] [2 Credits] *> English-friendly*
⊠ WSBIM2181	Molecular and cellular aspects of nutrition	Luc Bertrand Patrice Cani (coord.) Patrick Gilon Nicolas Lanthier Maria Veiga da Cunha	EN [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 Pierre van der Bruggen	EN [q1] [20h+10h] [3 Credits] *> English-friendly*
⊠ WSBIM2229	Interdisciplinary program in translational medicine		

⛒ 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.*		FR [q2] [50h] [5 Credits]

[redacted]

[redacted]ge obl[redacted]u choix (10 credits)

L'étudiant in[redacted]e parmi les trois suivants. L'étudiant inscrit au Master 60 remplace ces activités de l'option par tout autre co[redacted]master en sciences biomédicales.

⛒ WSBIM2271	International research internship	Pascal Kienlen-Campard (coord.)	[redacted]ace ces a9C

OPTION SCIENCES BIOMÉDICALES CLINIQUES [20.0]

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

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

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pre*** ***d command of certain subjects. If this is not the case, in the first annual take supplementary classes chosen by the faculty to satisfy course***

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From 15

WFARM1

WFARM1305	Elements of General Pathology	Mélanie Dechamps Olivier Feron (coord.)	FR [q2] [30h] [3 Credits] *> English-friendly*
WFARM1247	Statistical data processing	Eugen Pircalabelu	EN [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

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 wetensch000nen sciences chimiques			
Bachelier en sciences de l'ingénieur orientation bioingénieur Bachelier en sciences physiques			

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 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 BA: infirmier responsable de soins généraux - crédits supplémentaires entre 15 et 30	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 regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

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)2 764 73 62 - Fax: +32 (0)2 764 73 63

Other academic Supervisor(s)

- Charles De Smet

Jury

- Président du jury Master 60: Charles De Smet
- Secrétaire du jury Master 60: Laurent Gatto

Useful Contact(s)

- Conseiller aux études: Luc Bertrand
- Secrétariat de l'école des sciences biomédicales: Guillaume Arnould
- Président de la commission d'enseignement de l'école de sciences biomédicales: Charles De Smet
- Responsable administrative de la faculté de pharmacie et de sciences biomédicales:: Johanne Garny