SBIM1BA

2013 - 2014

Bachelor in Biomedicine

At Bruxelles Woluwe - 180 credits - 3 years - Day schedule - In french
Dissertation/Graduation Project : **NO** - Internship : **YES**
Activities in English: **NO** - Activities in other languages : **NO**
Activities on other sites : **NO**
Main study domain : **Sciences biomédicales et pharmaceutiques**
Organized by: **Faculté de pharmacie et des sciences biomédicales (FASB)**
Programme code: **sbim1ba** - European Qualifications Framework (EQF): 6

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SBIM1BA - Introduction

SBIM1BA - Admission

Decree of March 31st 2004 defining higher education and favoring the integration of higher education and university refinancing in the European area)
The admission conditions must be fulfilled at the time of enrolment at university.

General Conditions

Except as otherwise provided by other special legal provisions and with a view to obtaining the academic degree that recognises them, admission to undergraduate courses is granted to students with either:

- A certificate of Further Secondary Education issued from the academic year 1993–1994 by a fully fledged secondary education establishment or a school of Continuing Education in the French Community and approved by the Board created for that purpose, and holders of the same certificate issued from the 1994 calendar year by the education board of the French Community;
- or a certificate of Further Secondary Education issued not later than the end of the school year 1992–1993 accompanied, for admission to degree-length undergraduate studies, by a proficiency diploma giving access to higher education;
- or a diploma issued by a higher education establishment of the French Community recognising an academic degree, or a diploma issued by a university institution or an establishment dispensing full-time higher education under previous legislation;
- or a higher education certificate issued by a improvement courses establishment;
- a pass certificate for one of the entrance examinations co-ordinated by the higher education establishments or by a French Community education board and whose curricula are approved by the Government after consultation, according to the sector, with the Interuniversity Council of the French Community (Conseil interuniversitaire de la Communauté française – CIUF) or the General Council of the Hautes Ecoles (Conseil général des Hautes Ecoles – CGHE); this certificate gives admission to studies in relevant sectors or fields;
- or a diploma, certificate or secondary school certificate similar to those mentioned above issued by the Flemish Community (this certificate does not give exemption from the French Language Proficiency exam), by the German-speaking Community or the Royal Military School;
- of a diploma, certificate or secondary school certificate outside Belgium and recognised as equivalent to those mentioned above.

Requests for equivalence must be submitted to the Service des équivalences of the Ministry of Higher Education and Scientific Research of the French Community of Belgium before 15 July 2013.

Notes: the two following certificates are automatically recognised as equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire superieur – CESS): the European baccalaureat issued by the High Council of European Schools; the international baccalaureate issued by the International Baccalaureat Office, Geneva.

However, neither certificate automatically gives exemption from the French Language Proficiency exam;

- or a proficiency diploma giving access to higher education (diplôme d'aptitude à accéder à l'enseignement supérieur – DAES) conferred by the French Community examination board.

Exam of knowledge of the French language

Anyone not demonstrating sufficient French language proficiency will not be admitted to the first-year undergraduate examinations.

Special Conditions

- 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.
  Admission to these studies is always subject to passing the special entrance examination. The contents of the programme and the form of the examination may be obtained from the Secretariat of this faculty.
- 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).
- 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).
- 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).

- Admission to **undergraduate studies in medicine and dental science**
  Admission to undergraduate studies in medecine 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).

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

SBIM1BA - Information

Learning outcomes

Learning outcomes upon course completion

The goal of biomedical sciences is the study of the fundamental mechanisms of human life and research into new diagnostic, therapeutic and preventive applications. They allow attention to be focused on basic, applied or clinical research in multidisciplinary teams and environments as varied as the academic world, hospitals and industry.

The Bachelor in Biomedicine programme prepares for the development of experimental approaches in fields such as nutrition, toxicology and experimental or clinical biomedicine. The Bachelor's programme allows students to acquire the knowledge needed to understand human physiopathology. In addition, students develop the scientific abilities essential in practicing a profession in which intellectual discipline is called for: observational skills, the ability to read and interpret results, taking a critical view of the data collected. All of these skills will also be acquired during the course of the practical work.

Teaching method

Tout au long de son cursus de bachelier en sciences biomédicales, lâ€˜étudiant est confronté à des dispositifs pédagogiques variés : cours magistraux, tutorat, monitorat, travaux pratiques en laboratoire.

Ces derniers, nombreux, ont été mis en place pour permettre lâ€™apprentissage à la recherche par lâ€™expérimentation. Ils sont dâ€™ailleurs identifiés dans le programme par rapport au cours magistraux.

Evaluation

Acquisition of the course content is evaluated in accordance with the prevailing University rules and regulations (c.f. exam reglementation). Exams are organised at the end of the course session periods (January, June) as well as in September. Evaluation of the practical tasks and work experience also take the form of ongoing evaluation.

Mobility and/or Internationalisation outlook

Aucune mobilité dâ€™étudiant nâ€™est prévue au cours du 1er cycle des études de sciences biomédicales.

Possible trainings at the end of the programme

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SBIM1BA - Contacts

Curriculum Managment

Entite de la structure SBIM

Acronyme	**SBIM**
Dénomination	Ecole des sciences biomédicales
Adresse	Avenue Mounier, 73 bte B1.73.04
	1200 Woluwe-Saint-Lambert
	Tél 02 764 73 62 - Fax 02 764 73 63
Secteur	Secteur des sciences de la santé (SSS)
Faculté	Faculté de pharmacie et des sciences biomédicales (FASB)
Commission de programme	Ecole des sciences biomédicales (SBIM)

Academic Supervisor : Pascal Kienlen-Campard

Jury

Président de jury de 1re année de bachelier : **Etienne Sonveaux**
Secrétaire de jury de la 1re année : **Jean-Baptiste Demoulin**
Président de jury de 2e année de bachelier : **Pierre Courtoy**
Secrétaire de jury de la 2e année : **Thomas Michiels**
Président de jury de 3e année de bachelier : **Jean-Christophe Renauld**
Secrétaire de jury de la 3e année : **Pascal Kienlen-Campard**

Usefull Contacts

Personne de contact de la 1re année de bachelier : **Fabienne Titeux**
Personne de contact des 2e et 3e années de bachelier : **Guillaume Arnould**
Président de la commission d'enseignement de l'école de sciences biomédicales : **Jean-Noël Octave**
Conseiller aux études : **Charles De Smet**
Responsable administrative de la faculté de pharmacie et de sciences biomédicales : **Stéphanie Lozes**

SBIM1BA - Detailled programme

Programme structure

Structure of the programme

The Bachelor in Biomedicine programme is composed of a major and a minor and is worth a total of 180 credits.

The Biomedicine major includes 150 credits. It comprises basic science training attracting 60 credits (1st year) and training attracting 90 credits (2nd and 3rd years) allowing students to acquire knowledge essential for an understanding of human psychopathology. Courses in English and human sciences (philosophy, psychology) also form part of the programme.

The minor includes 30 credits and completes the programme. These 30 credits are divided over years 2 and 3 of the bachelor's programme, at 15 credits per year.

Students can choose between two types of minor:

• An additional module (of the biomedicine major)

• An access module (to other disciplines; this training is organised by other schools or faculties).

The additional module classes provide the chance to get to know the different foci offered in the Master's: research focus, professional focus: toxicology, professional focus: human nutrition, professional focus: clinical biomedicine.

The list of access modules can be consulted at https://www.uclouvain.be/programme-mineures

Programme by subject

Majeure (150 credits)

Des atomes, des molécules et des systèmes qui les régissent

						Year 1	Year 2	Year 3
WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Eduardo Cortina Gil, Bernard Piraux (coord.)	60h+21h	8 Credits	1q	x		
WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Michel Herquet (compensates Fabio Maltoni), Fabio Maltoni	30h+21h	5 Credits	2q	x		
WSBIM1001	MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES	Julien Federinov, André Nauts, Annie Robert	45h+20h	5 Credits	2q	x		
WMD1105	Chimie générale et minérale	Daniel Peeters, Etienne Sonveaux (coord.)	60h+30h	9 Credits	1q	x		
WMD1106	ORGANIC CHEMISTRY	Mohamed Ayadim, Jacques Poupaert, Etienne Sonveaux (coord.)	60h+30h	9 Credits	2q	x		
WPHAR1300	Pharmacologie 1re partie	Emmanuel Hermans, Marie-Paule Mingeot	30h+7.5h	3 Credits	1q			x
WFARM1300P	Pharmacocinétique et métabolisme des xénobiotiques (partim pharmacocinétique 20h + 10h)	N.	30h+30h	3 Credits	1q			x
WFARM1221S	Biochimie et biologie moléculaire (partim biochimie)	Nathalie Delzenne, Marie-Paule Mingeot	50h+10h	6 Credits	1+2q		x	

De la cellule à l'être humain

						Year 1	Year 2	Year 3
WMD1120	Biologie générale et approche expérimentale de la biologie	Jean Baptiste Demoulin, Pascal Kienlen-Campard, Marie-Christine Many	75h+25h	10 Credits	1q	x		
WMD1006	Cytology and general histology	Jean-François Denef, Anne-Catherine Gérard, Marie-Christine Many (coord.)	10h+40h	5 Credits	2q	x		

						Year 1	2	3
WFARM1009	Elements of general and functional anatomy	Catherine Behets Wydemans (coord.), Christine Galant, Jean Rubay	30h	3 Credits		x		
WSBIM1226	Biologie moléculaire (dont l'épigénétique) et travaux dirigés	Charles De Smet, Frédéric Lemaigre, Thomas Michiels	30h+10h	3 Credits	1+2q		x	
WSBIM1227	Biologie moléculaire et biochimie intégrée	Etienne De Plaen, Jean-Noël Octave	20h+30h	3 Credits	2q		x	
WMDS1211	Biologie cellulaire, médicale et expérimentale	Stefan Constantinescu, Pierre Courtoy (coord.), Christophe Pierreux, Donatienne Tyteca	30h+20h	4 Credits	1q		x	
WANAT1110	Human embryology	André Goffinet	30h	3 Credits	2q		x	
WSBIM1201T	Physiologie générale (partim théorie, 40h)	N.	40h+25h	4 Credits	1q		x	
WSBIM1201P	Physiologie générale (partie travaux pratiques, 25h)	N.	40h+25h	2 Credits	1q		x	
WSBIM1203	Histologie spéciale	Jean-François Denef, Marie-Christine Many (coord.), Etienne Marbaix	15h+15h	3 Credits	1q		x	
WSBIM1204	Atelier d'histologie	Yves Guiot, Marie-Christine Many, Etienne Marbaix (coord.)	30h	2 Credits	2q		x	
WFARM1282	General microbiology	Thomas Michiels	20h+15h	3 Credits	1+2q		x	
WSBIM1200	Introduction à l'analyse instrumentale biomédicale	Bernard Gallez, Giulio Muccioli (coord.)	30h+30h	4 Credits	1q		x	
WFARM1213	Human physiology and basics of physiopathology	Olivier Feron, Emmanuel Hermans, Jean-Christophe Jonas	60h	5 Credits	2q			x
WSBIM1303	Workshop on experimental strategy in cellular and molecular biology	Luc Bertrand, Anabelle Decottignies, Pascal Kienlen-Campard (coord.)	60h	6 Credits	2q			x
WBCHM1315T	Biochimie humaine normale et pathologique (partim théorie)	Frédéric Lemaigre (coord.), Emile Van Schaftingen	60h	5 Credits	1q			x
WBCHM1315P	Biochimie humaine normale et pathologique (partim travaux pratiques)	N.	0h+16h	1 Credits	1q			x
WBCHM1317	Human Genetics	Miikka Vikkula	15h	2 Credits	1q			x
WSBIM1304	General immunology	Pierre Coulie, Jean-Christophe Renauld, Benoît Van den Eynde	60h	4 Credits	1q			x
WFARM1382	Molecular genetics and drugs	Etienne De Plaen, Jean-Noël Octave (coord.)	30h	3 Credits	2q			x
WSBIM1302	Molecular Virology	Thomas Michiels	15h	2 Credits	1q			x
WFARM1305	Elements of General Pathology	Olivier Feron, Stéphane Moniotte (coord.)	30h	3 Credits				x
WSBIM1293	Training course in cell biology	Pascal Kienlen-Campard (coord.), Jean-Christophe Renauld	30h	2 Credits	2q		x	

L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours ESP2121.

WESP1010	Introduction à la statistique descriptive et aux probabilités	William D'Hoore (coord.), Niko Speybroeck	15h+15h	3 Credits			x	
WESP2121	Epidemiology	Niko Speybroeck	20h+20h	3 Credits	2q			x

						Year 1	2	3
WESP2118	Statistique en sciences de la santé	William D'Hoore, Annie Robert, Niko Speybroeck	32h+20h	3 Credits	1q			x
LANGL1854	Medical English	Timothy Byrne, Carlo Lefevre (coord.), Nevin Serbest	30h	3 Credits	2q	x		
LANGL1855	Medical English	Timothy Byrne (coord.), Sandrine Jacob (coord.)	30h	3 Credits	2q		x	
LANGL2454	English for biomedical students	Nevin Serbest	30h	2 Credits	2q			x
WFARM1160	Philosophy	Mylene Botbol	30h	3 Credits	1q	x		

Mineure (30 credits)

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

Additionnal module in Biomedical Sciences (30 credits)

Deuxième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

WSBIM1205	Introduction à la toxicologie	Nathalie Delzenne, Philippe Hantson, Vincent Haufroid, Perrine Hoet, François Huaux, Dominique Lison (coord.), Pierre Wallemacq	30h	3 Credits	2q		x	
WMD1200	Eléments d'épidémiologie	Jean-Marie Degryse, Niko Speybroeck	20h+20h	3 Credits	2q		x	
WSBIM1211	Methodolgy of cell and molecular biology	Guido Bommer, Jean-François Collet (coord.), Christophe Pierreux	22.5h	3 Credits	2q		x	
WSBIM1206	Nutrition	Sonia Brichard, Jean-Paul Thissen	30h	3 Credits	1q		x	
WSBIM1220	Eléments de neurosciences	Emmanuel Hermans (coord.), Marcus Missal, Etienne Olivier	30h	3 Credits	2q		x	

Troisième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

WFARM2139T	Pharmacogénomique et toxicologie (partim toxicologie, 30h)	N.	37.5h	3 Credits	1q			x
WSBIM1320	Introduction aux approches expérimentales de la biologie cellulaire et moléculaire	Pierre Courtoy (coord.), Pascal Kienlen-Campard, Jean-Noël Octave	30h	3 Credits	2q			x
WSBIM1305	Introduction à la nutrition humaine	Véronique Beauloye, Sonia Brichard (coord.)	30h	3 Credits				x
WSBIM1393	Stage en laboratoire	Pascal Kienlen-Campard	30h	3 Credits	2q			x
WSBIM1321	Eléments de neurosciences, 2e partie	Frédéric Clotman, Philippe Gailly, Pascal Kienlen-Campard (coord.)	30h	3 Credits				x

Mineure d'ouverture (30 credits)

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

	Mineure d'ouverture *Voir la liste ci-dessous.*	N.		15 Credits			x	
	Mineure d'ouverture *L'étudiant poursuit la mineure d'ouverture choisie en 2e année dans la liste ci-dessous.*	N.		15 Credits				x

Programme year by year

SBIM1BA - FIRST YEAR

O Mandatory	⊠ Optional
△ Courses not taught during 2013-2014	⊘ Periodic courses not taught during 2013-2014
⊕ Periodic courses taught during 2013-2014	⧺ Two years course

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

O WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Eduardo Cortina Gil, Bernard Piraux (coord.)	60h+21h	8 Credits	1q
O WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Michel Herquet (compensates Fabio Maltoni), Fabio Maltoni	30h+21h	5 Credits	2q
O WSBIM1001	MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES	Julien Federinov, André Nauts, Annie Robert	45h+20h	5 Credits	2q
O WMD1105	Chimie générale et minérale	Daniel Peeters, Etienne Sonveaux (coord.)	60h+30h	9 Credits	1q
O WMD1106	ORGANIC CHEMISTRY	Mohamed Ayadim, Jacques Poupaert, Etienne Sonveaux (coord.)	60h+30h	9 Credits	2q

O De la cellule à l'être humain

O WMD1120	Biologie générale et approche expérimentale de la biologie	Jean Baptiste Demoulin, Pascal Kienlen-Campard, Marie-Christine Many	75h+25h	10 Credits	1q
O WMD1006	Cytology and general histology	Jean-François Denef, Anne-Catherine Gérard, Marie-Christine Many (coord.)	10h+40h	5 Credits	2q
O WFARM1009	Elements of general and functional anatomy	Catherine Behets Wydemans (coord.), Christine Galant, Jean Rubay	30h	3 Credits	

O L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours ESP2121.

O LANGL1854	Medical English	Timothy Byrne, Carlo Lefevre (coord.), Nevin Serbest	30h	3 Credits	2q
O WFARM1160	Philosophy	Mylene Botbol	30h	3 Credits	1q

SBIM1BA - SECOND YEAR

O Mandatory	⊠ Optional
△ Courses not taught during 2013-2014	⊘ Periodic courses not taught during 2013-2014
⊕ Periodic courses taught during 2013-2014	⧺ Two years course

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

O WFARM1221S	Biochimie et biologie moléculaire (partim biochimie)	Nathalie Delzenne, Marie-Paule Mingeot	50h+10h	6 Credits	1+2q

O De la cellule à l'être humain

O WSBIM1226	Biologie moléculaire (dont l'épigénétique) et travaux dirigés	Charles De Smet, Frédéric Lemaigre, Thomas Michiels	30h+10h	3 Credits	1+2q
O WSBIM1227	Biologie moléculaire et biochimie intégrée	Etienne De Plaen, Jean-Noël Octave	20h+30h	3 Credits	2q
O WMDS1211	Biologie cellulaire, médicale et expérimentale	Stefan Constantinescu, Pierre Courtoy (coord.), Christophe Pierreux, Donatienne Tyteca	30h+20h	4 Credits	1q
O WANAT1110	Human embryology	André Goffinet	30h	3 Credits	2q
O WSBIM1201T	Physiologie générale (partim théorie, 40h)	N.	40h+25h	4 Credits	1q
O WSBIM1201P	Physiologie générale (partie travaux pratiques, 25h)	N.	40h+25h	2 Credits	1q
O WSBIM1203	Histologie spéciale	Jean-François Denef, Marie-Christine Many (coord.), Etienne Marbaix	15h+15h	3 Credits	1q
O WSBIM1204	Atelier d'histologie	Yves Guiot, Marie-Christine Many, Etienne Marbaix (coord.)	30h	2 Credits	2q
O WFARM1282	General microbiology	Thomas Michiels	20h+15h	3 Credits	1+2q
O WSBIM1200	Introduction à l'analyse instrumentale biomédicale	Bernard Gallez, Giulio Muccioli (coord.)	30h+30h	4 Credits	1q
O WSBIM1293	Training course in cell biology	Pascal Kienlen-Campard (coord.), Jean-Christophe Renauld	30h	2 Credits	2q

O L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours ESP2121.

O WESP1010	Introduction à la statistique descriptive et aux probabilités	William D'Hoore (coord.), Niko Speybroeck	15h+15h	3 Credits	
O LANGL1855	Medical English	Timothy Byrne (coord.), Sandrine Jacob (coord.)	30h	3 Credits	2q

O Mineure

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

⊠ Additionnal module in Biomedical Sciences

O Deuxième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

WSBIM1205	Introduction à la toxicologie	Nathalie Delzenne, Philippe Hantson, Vincent Haufroid, Perrine Hoet, François Huaux, Dominique Lison (coord.), Pierre Wallemacq	30h	3 Credits	2q
WMD1200	Eléments d'épidémiologie	Jean-Marie Degryse, Niko Speybroeck	20h+20h	3 Credits	2q
WSBIM1211	Methodolgy of cell and molecular biology	Guido Bommer, Jean-François Collet (coord.), Christophe Pierreux	22.5h	3 Credits	2q
WSBIM1206	Nutrition	Sonia Brichard, Jean-Paul Thissen	30h	3 Credits	1q
WSBIM1220	Eléments de neurosciences	Emmanuel Hermans (coord.), Marcus Missal, Etienne Olivier	30h	3 Credits	2q

⊠ Mineure d'ouverture

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

	Mineure d'ouverture *Voir la liste ci-dessous.*	N.		15 Credits	

SBIM1BA - THIRD YEAR

O Mandatory	⊠ Optional
△ Courses not taught during 2013-2014	⊘ Periodic courses not taught during 2013-2014
⊕ Periodic courses taught during 2013-2014	⧺ Two years course

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

O WPHAR1300	Pharmacologie 1re partie	Emmanuel Hermans, Marie-Paule Mingeot	30h+7.5h	3 Credits	1q
O WFARM1300P	Pharmacocinétique et métabolisme des xénobiotiques (partim pharmacocinétique 20h + 10h)	N.	30h+30h	3 Credits	1q

O De la cellule à l'être humain

O WFARM1213	Human physiology and basics of physiopathology	Olivier Feron, Emmanuel Hermans, Jean-Christophe Jonas	60h	5 Credits	2q
O WSBIM1303	Workshop on experimental strategy in cellular and molecular biology	Luc Bertrand, Anabelle Decottignies, Pascal Kienlen-Campard (coord.)	60h	6 Credits	2q
O WBCHM1315T	Biochimie humaine normale et pathologique (partim théorie)	Frédéric Lemaigre (coord.), Emile Van Schaftingen	60h	5 Credits	1q
O WBCHM1315P	Biochimie humaine normale et pathologique (partim travaux pratiques)	N.	0h+16h	1 Credits	1q
O WBCHM1317	Human Genetics	Miikka Vikkula	15h	2 Credits	1q
O WSBIM1304	General immunology	Pierre Coulie, Jean-Christophe Renauld, Benoît Van den Eynde	60h	4 Credits	1q
O WFARM1382	Molecular genetics and drugs	Etienne De Plaen, Jean-Noël Octave (coord.)	30h	3 Credits	2q
O WSBIM1302	Molecular Virology	Thomas Michiels	15h	2 Credits	1q
O WFARM1305	Elements of General Pathology	Olivier Feron, Stéphane Moniotte (coord.)	30h	3 Credits	

O L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours ESP2121.

O WESP2121	Epidemiology	Niko Speybroeck	20h+20h	3 Credits	2q
O WESP2118	Statistique en sciences de la santé	William D'Hoore, Annie Robert, Niko Speybroeck	32h+20h	3 Credits	1q
O LANGL2454	English for biomedical students	Nevin Serbest	30h	2 Credits	2q

O Mineure

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

⊠ Additionnal module in Biomedical Sciences

O Troisième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

O WFARM2139T	Pharmacogénomique et toxicologie (partim toxicologie, 30h)	N.	37.5h	3 Credits	1q

WSBIM1320	Introduction aux approches expérimentales de la biologie cellulaire et moléculaire	Pierre Courtoy (coord.), Pascal Kienlen-Campard, Jean-Noël Octave	30h	3 Credits	2q
WSBIM1305	Introduction à la nutrition humaine	Véronique Beauloye, Sonia Brichard (coord.)	30h	3 Credits	
WSBIM1393	Stage en laboratoire	Pascal Kienlen-Campard	30h	3 Credits	2q
WSBIM1321	Eléments de neurosciences, 2e partie	Frédéric Clotman, Philippe Gailly, Pascal Kienlen-Campard (coord.)	30h	3 Credits	

⊠ Mineure d'ouverture

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

	Mineure d'ouverture *L'étudiant poursuit la mineure d'ouverture choisie en 2e année dans la liste ci-dessous.*	N.		15 Credits	

List of available minors

During the bachelor's of Biomedical Sciences, personally selected options will give the student the opportunity to become more familiar with the different branches available at master's level.

Instead of the options, the bachelor's may also include a "minor" which will enable the student to open up new horizons.

> Additionnal module in Biomedical Sciences *[https://www.uclouvain.be/en-prog-2013-app-wsbim100p]*
> Minor in Antiquity : Egypt, Orient, Greece, Rome *[https://www.uclouvain.be/en-prog-2013-min-lanti100i]*
> Minor in Chinese studies *[https://www.uclouvain.be/en-prog-2013-min-lchin100i]*
> Minor in Criminology *[https://www.uclouvain.be/en-prog-2013-min-lcrim100i]*
> Minor in Culture and Creation *[https://www.uclouvain.be/en-prog-2013-min-lcucr100i]*
> Minor in Development and Environment *[https://www.uclouvain.be/en-prog-2013-min-ldenv100i]*
> Minor in Economics *[https://www.uclouvain.be/en-prog-2013-min-lecon100i]*
> Minor in Economics (open) *[https://www.uclouvain.be/en-prog-2013-min-loeco100i]*
> Minor in Education (*) *[https://www.uclouvain.be/en-prog-2013-min-lfopa100i]*
> Minor in European Studies *[https://www.uclouvain.be/en-prog-2013-min-leuro100i]*
> Minor in French Studies (*) *[https://www.uclouvain.be/en-prog-2013-min-lfran100i]*
> Minor in Gender Studies *[https://www.uclouvain.be/en-prog-2013-min-lgenr100i]*
> Minor in Geography (*) *[https://www.uclouvain.be/en-prog-2013-min-lgeog100i]*
> Minor in History *[https://www.uclouvain.be/en-prog-2013-min-lhist100i]*
> Minor in History of Art and Archeology *[https://www.uclouvain.be/en-prog-2013-min-larke100i]*
> Minor in Human and Social Sciences *[https://www.uclouvain.be/en-prog-2013-min-lhuso100i]*
> Minor in Information and Communication (*) *[https://www.uclouvain.be/en-prog-2013-min-lcomu100i]*
> Minor in Law (access) *[https://www.uclouvain.be/en-prog-2013-min-ladrt100i]*
> Minor in Law (open) *[https://www.uclouvain.be/en-prog-2013-min-lodrt100i]*
> Minor in Linguistics *[https://www.uclouvain.be/en-prog-2013-min-lling100i]*
> Minor in Literary Studies *[https://www.uclouvain.be/en-prog-2013-min-llitt100i]*
> Minor in Mangement (basic knowledge) *[https://www.uclouvain.be/en-prog-2013-min-lgesa100i]*
> Minor in Medication Sciences (*) *[https://www.uclouvain.be/en-prog-2013-min-wfarm100i]*
> Minor in Medieval Studies *[https://www.uclouvain.be/en-prog-2013-min-lmedi100i]*
> Minor in Musicology *[https://www.uclouvain.be/en-prog-2013-min-lmusi100i]*
> Minor in Oriental Studies *[https://www.uclouvain.be/en-prog-2013-min-lori100i]*
> Minor in Philosophy *[https://www.uclouvain.be/en-prog-2013-min-lisp100i]*
> Minor in Political Sciences *[https://www.uclouvain.be/en-prog-2013-min-lspol100i]*
> Minor in Population and Development Studies *[https://www.uclouvain.be/en-prog-2013-min-lsped100i]*
> Minor in Psychology and Education (*) *[https://www.uclouvain.be/en-prog-2013-min-lpsp100i]*
> Minor in Scientific Culture *[https://www.uclouvain.be/en-prog-2013-min-lcusc100i]*
> Minor in Sociology and Anthropology *[https://www.uclouvain.be/en-prog-2013-min-lsoca100i]*
> Minor in Statistics *[https://www.uclouvain.be/en-prog-2013-min-lstat100i]*
> Minor in Theology *[https://www.uclouvain.be/en-prog-2013-min-ltheo100i]*

(*) This program is the subject of access criteria