

SBIM1BA - Introduction

Introduction

The major is completed by a course equivalent to 30 credits, which may be an option selected from "the options menu" (more advanced studies in Biomedical Sciences) or a "minor" (an opening course in other disciplines). The course of 30 credits may be followed together with the specialised course.

Principal Subjects

The bachelor's studies enable the student to apprehend the world of the living, from a single atom to the whole of society .

A toms, molecules and the systems which govern them :

General and Organic Chemistry - Biochemistry - Applied Physics - Pharmacology and Pharmacokinetics - Mathematics.

From a single cell to a human being

Morphological and Functional Approach : General Cellular and Molecular Biology, - Cytology and Histology- Anatomy - Embryology - Immunology - Physiology - Microbiology - General Pathology.

Man and society







Contextual Approach : Philosophy - Psychology.

Research experience

Statistics - Strategies and applied models - Genetic Engineering - Instrumental Analysis.

Other studies

English

				Year		
				1	2	3
○ WSBIM1313	Experimental design in biomedical sciences 	Luc Bertrand Charles De Smet Pascal Kienlen-Campard (coord.)	FR [q2] [40h] [4 Credits]  > English-friendly			x
○ WSBIM1335	Introduction to pathophysiology 	Christiani Andrade Amorim Antoine Froidure Jean-Christophe Jonas (coord.) Shakeel Kautbally	FR [q2] [30h] [3 Credits] 			x
○ WSBIM1293	Training course in cell biology 	Laure Dumoutier (coord.) Julie Stockis	FR [q2] [30h] [2 Credits] 	x		

Year

1 2 3

● WSBIM1320	Introduction to experimental approaches in cellular and molecular biology 📄	Luc Bertrand Anne des Rieux Sandrine Horman Donatienne Tyteca (coord.)	PR [q2] [30h] [3 Credits] 🌐	
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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.

- > [Minor in Law \(access\)](#) [en-prog-2024-minadro]
- > [Minor in Antiquity: Egypt, Eastern World, Greece, Rome](#) [en-prog-2024-minanti]
- > [Minor in History of Art and Archeology](#) [en-prog-2024-minarke]
- > [Minor in Chinese studies](#) [en-prog-2024-minchin]
- > [Minor in Information and Communication](#) [en-prog-2024-mincomu]
- > [Minor in Criminology](#) [en-prog-2024-mincrim]
- > [Minor in Culture and Creation](#) [en-prog-2024-mincucree]
- > [Minor in Scientific Culture](#) [en-prog-2024-mincults]
- > [Minor in Development and Environment](#) [en-prog-2024-mindenv]
- > [Minor : Issues of Transition and Sustainable Development \(*\)](#) [en-prog-2024-mindd]
- > [Minor in Economics](#) [en-prog-2024-minecon]
- > [Minor in European Studies](#) [en-prog-2024-mineuro]
- > [Minor in Gender Studies](#) [en-prog-2024-mingenre]
- > [Minor in Mangement \(basic knowledge\)](#) [en-prog-2024-minogest]
- > [Minor in History](#) [en-prog-2024-minhist]
- > [Minor in Human and Social Sciences](#) [en-prog-2024-minhuso]
- > [Minor in Arabic language and Islamic civilization](#) [en-prog-2024-minislam]
- > [Minor in Philosophy](#) [en-prog-2024-minfilo]
- > [Minor in Medieval Studies](#) [en-prog-2024-minmedi]
- > [Minor in Musicology](#) [en-prog-2024-minmusi]
- > [Minor in Law \(openness\)](#) [en-prog-2024-minodroi]
- > [Minor in Economics \(open\)](#) [en-prog-2024-minoeco]
- > [Minor in Oriental Studies](#) [en-prog-2024-minori]
- > [Minor in Sciences of Religions \(openness\)](#) [en-prog-2024-minreli]
- > [Minor in Sociology and Anthropology](#) [en-prog-2024-minsoca]
- > [Minor in Population and Development Studies](#) [en-prog-2024-minsped]
- > [Minor in Political Sciences](#) [en-prog-2024-minspol]
- > [Minor in Statistics, Actuarial Sciences and Data Sciences](#) [en-prog-2024-minstat]
- > [Minor in numerical technologies and society](#) [en-prog-2024-minstic]
- > [Minor in Christian Theology](#) [en-prog-2024-mintheo]
- > [Minor in Medication Sciences](#) [en-prog-2024-minfarm]
- > [Additional module in Biomedical Sciences](#) [en-prog-2024-appsbim]
- > [Minor in Literary Studies](#) [en-prog-2024-minlitter]
- > [Minor in Linguistics](#) [en-prog-2024-minlingui]

(*) *This programme is the subject of access criteria*

- WMDS1231** "Biochimie humaine pathologique" has prerequisite(s) WFARM1213S ET WFARM1221S ET WSBIM1227 ET WFARM1282 ET WFARM1247 ET WSBIM1201T ET WSBIM1201P
- WFARM1213S - Human physiology and basics of physiopathology - (Partim SBIM)
 - WFARM1221S - Biochemistry and molecular biology
 - WSBIM1227 - Molecular biology and integrated biochemistry
 - WFARM1282 - General microbiology
 - WFARM1247 - Statistical data processing
 - WSBIM1201T - General physiology - General physiology (theory part, 40h)
 - WSBIM1201P - General physiology - General physiology (practical part, 25h)
- WPHAR1300** "Pharmacologie 1re partie" has prerequisite(s) WFARM1213S ET WSBIM1201T ET WSBIM1201P
- WFARM1213S - Human physiology and basics of physiopathology - (Partim SBIM)
 - WSBIM1201T - General physiology - General physiology (theory part, 40h)
 - WSBIM1201P - General physiology - General physiology (practical part, 25h)
- WSBIM1200** "Analyse instrumentale biomédicale et radioprotection" has prerequisite(s) WSBIM1001 ET WMD1105 ET WMD1106
- WSBIM1001 - MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES
 - WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
- WSBIM1201P** "Physiologie générale (partie travaux pratiques, 25h)" has prerequisite(s) WMD1102 ET WMD1104
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
 - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
- WSBIM1201T** "Physiologie générale (partim théorie, 40h)" has prerequisite(s) WMD1120 ET WMD1006 ET WMD1102 ET WMD1104
- WMD1120 - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general histology
 - WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
 - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
- WSBIM1203** "Histologie spéciale et hématologie" has prerequisite(s) WFARM1009 ET WMD1006
- WFARM1009 - Elements of general and functional anatomy
 - WMD1006 - Cytology and general histology
- WSBIM1205** "Introduction à la toxicologie" has prerequisite(s) WMD1105 ET WMD1106
- WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
- WSBIM1206** "Du nutriment à l'aliment" has prerequisite(s) WFARM1009 ET WMD1105 ET WMD1106
- WFARM1009 - Elements of general and functional anatomy
 - WMD1105 - Chimie générale et minérale
 - WMD1106 - ORGANIC CHEMISTRY
- WSBIM1207** "Introduction à la bio-informatique" has prerequisite(s) WMD1102 ET WSBIM1001 ET LANGL1854
- WMD1102 - Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)
 - WSBIM1001 - MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES
 - LANGL1854 - Medical English
- WSBIM1211** "Méthodologie de la biologie cellulaire et moléculaire" has prerequisite(s) WMD1120 ET WMD1006 ET WSBIM1001 ET WMD1105
- WMD1120 - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general histology
 - WSBIM1001 - MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES
 - WMD1105 - Chimie générale et minérale
- WSBIM1220** "Neurobiologie" has prerequisite(s) WFARM1009
- WFARM1009 - Elements of general and functional anatomy
- WSBIM1226** "Biologie moléculaire (dont l'épigénétique) et travaux dirigés" has prerequisite(s) WMD1120 ET WMD1106
- WMD1120 - General biology and an experimental approach to biology
 - WMD1106 - ORGANIC CHEMISTRY
- WSBIM1227** "Biologie moléculaire et biochimie intégrée" has prerequisite(s) WSBIM1001 ET WMD1106
- WSBIM1001 - MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES
 - WMD1106 - ORGANIC CHEMISTRY
- WSBIM1293** "Stage de biologie cellulaire" has prerequisite(s) - Chimie gè5
- WMD1120 - General biology and an experimental approach to biology
 - WMD1006 - Cytology and general nérale
 - WMD1104 - Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)
 - WSBIM1001 - MATHEMATICAL METHODS IN BIOMEDICAL CHEMISTRY

- WFARM1213S - [Human physiology and basics of physiopathology - \(Partim SBIM\)](#)
 - WSBIM1203 - [Special histology and hematology](#)
- WSBIM1310** "[Embryologie](#)" has prerequisite(s) WSBIM1226 ET WSBIM1227 ET WMDS1230
- WSBIM1226 - [Molecular biology \(including epigenetics\) and tutorials](#)
 - WSBIM1227 - [Molecular biology and integrated biochemistry](#)
 - WMDS1230 - [Biologie cellulaire médicale et expérimentale](#)
- WSBIM1313** "[Design expérimental en sciences biomédicales](#)" has prerequisite(s) WFARM1221S ET WSBIM1226 ET WSBIM1227 ET WMDS1230 ET WSBIM1293 ET WFARM1282 ET WSBIM1201T ET WSBIM1200
- WFARM1221S - [Biochemistry and molecular biology](#)
 - WSBIM1226 - [Molecular biology \(including epigenetics\) and tutorials](#)
 - WSBIM1227 - [Molecular biology and integrated biochemistry](#)
 - WMDS1230 - [Biologie cellulaire médicale et expérimentale](#)
 - WSBIM1293 - [Training course in cell biology](#)
 - WFARM1282 - [General microbiology](#)
 - WSBIM1201T - [General physiology - General physiology \(theory part, 40h\)](#)
 - WSBIM1200 - [Biomedical instrumental analysis and radiation protection](#)
- WSBIM1320** "[Introduction aux approches expérimentales de la biologie cellulaire et moléculaire](#)" has prerequisite(s) WSBIM1226 ET WSBIM1227 ET WMDS1230 ET WSBIM1211 ET LANGL1855 ET WSBIM1200
- WSBIM1226 - [Molecular biology \(including epigenetics\) and tutorials](#)
 - WSBIM1227 - [Molecular biology and integrated biochemistry](#)
 - WMDS1230 - [Biologie cellulaire médicale et expérimentale](#)
 - WSBIM1211 - [Methodology of cell and molecular biology](#)
 - LANGL1855 - [Medical English](#)
 - WSBIM1200 - [Biomedical instrumental analysis and radiation protection](#)
- WSBIM1322** "[Bioinformatique](#)" has prerequisite(s) WFARM1247 ET WSBIM1207 ET LANGL1855
- WFARM1247 - [Statistical data processing](#)
 - WSBIM1207 - [Introduction to bioinformatics](#)
 - LANGL1855 - [Medical English](#)
- WSBIM1323** "[Neurosciences systémiques](#)" has prerequisite(s) WSBIM1201T ET WSBIM1201P ET WSBIM1220
- WSBIM1201T - [General physiology - General physiology \(theory part, 40h\)](#)
 - WSBIM1201P - [General physiology - General physiology \(practical part, 25h\)](#)
 - WSBIM1220 - [Neurobiology](#)
- WSBIM1334** "[Immunologie générale](#)" has prerequisite(s)

Detailed programme per annual block

SBIM1BA - 1ST ANNUAL UNIT

- Mandatory
 - ✘ Optional
 - △ Not offered in 2024-2025
 - ⊖ Not offered in 2024-2025 but offered the following year
 - ⊕ Offered in 2024-2025 but not the following year
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SBIM1BA - 2ND ANNUAL UNIT

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

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

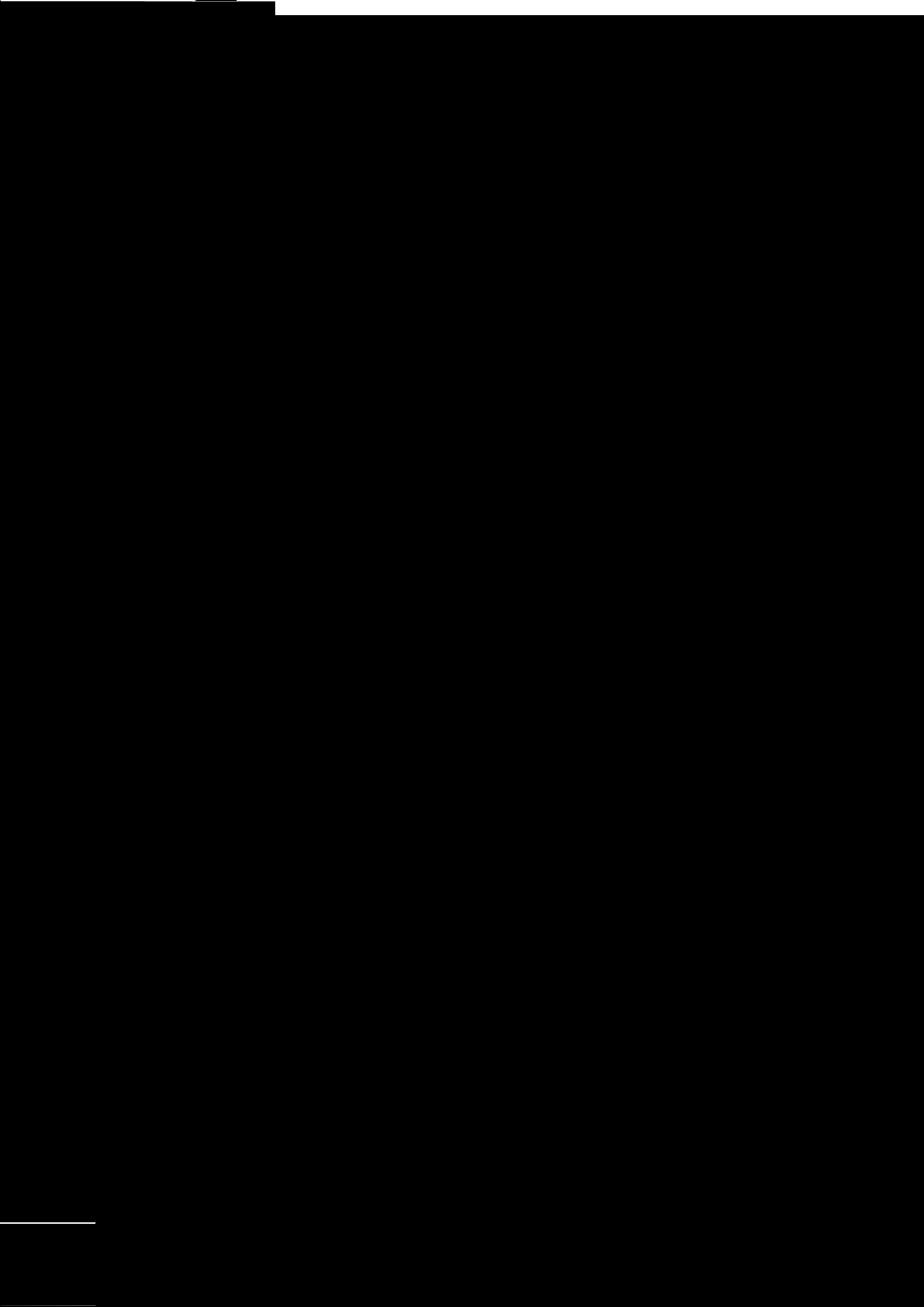
o Majeure

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

● WFARM1221S	Biochemistry and molecular biology ■	Nathalie Delzenne (coord.)	
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SBIM1BA - 3RD ANNUAL UNIT

- Mandatory
 - ✘ Optional
 - △ Not offered in 2024-2025
 - ⊙
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SBIM1BA - Information

Access Requirements

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

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

SUMMARY

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

General access requirements

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

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

Note:

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

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

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

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

Specific access requirements

- Access to bachelor programmes for candidates of nationality outside the European Union who are not assimilated to Belgian nationals is subject to the following criteria:

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- 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](#).
- For any secondary school diploma **from a country outside the European Union**, the admission application must contain the

Teaching method

Throughout the Bachelor in Biomedicine programme, students encounter a variety of teaching methods: classroom lectures, tutoring, mentoring and practical laboratory work.

The substantial amount of laboratory work was introduced to enable learning in research through experimentation. It is also identified in the programme in relation to classroom lectures.

Evaluation

Useful Contact(s)

- Personne de contact de la 1re année de bachelier: [Fabienne Titeux](#)
- Personne de contact du cycle de bachelier (hors première): [Guillaume Arnould](#)
- Président de la commission d'enseignement de l'école de sciences biomédicales: [Charles De Smet](#)
- Conseiller aux études: [Laure Dumoutier](#)
- Responsable administrative de la faculté de pharmacie et de sciences biomédicales: [Johanne Garny](#)

