



**SBIM1BA -**

## SBIM1BA - Teaching profile

### Learning outcomes

---

Bachelor in Biomedicine students must endeavour to prepare themselves for the training offered in the various Master's programmes taught by the School of Biomedical Sciences. To this end, students will apply themselves to acquiring the knowledge and skills that will enable them to become specialists in a field of biomedicine and play an integral part in a scientific project.

As part of the Bachelor in Biomedicine programme, students will study in detail the basic scientific foundations required to practise biomedicine and will discover a variety of specific areas of biomedical research. These activities will enable them to decide on their training projects for the Master's programme. In addition, practical lab work will enable Bachelor students to acquire the professional skills that they will develop during the Master's programme with increasing robustness and independence.

The objective of the School of Biomedical Sciences is to produce health sector professionals capable of conducting and interpreting scientific projects intended to improve the understanding, diagnosis and treatment of human diseases. In particular, the training is aimed at developing the skills required for the acquisition and analysis of observations and experiments in biomedicine, while at the same time cultivating scientific robustness and integrity.

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

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] 🌐			x
○ WSBIM1305	Introduction to human nutrition 📄	Véronique Beauloy998 0   S Q q 1 0r 0 1 7.503 50.327999 cm -1 0 0 -1 0 0 cm 0 0 m				





## Course prerequisites

---

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified **in the detailed programme**: their title is followed by a yellow square.

### Prerequisites and student's annual programme

As the prerequisite is for CU registration purposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.

- 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)

- 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
-

**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**

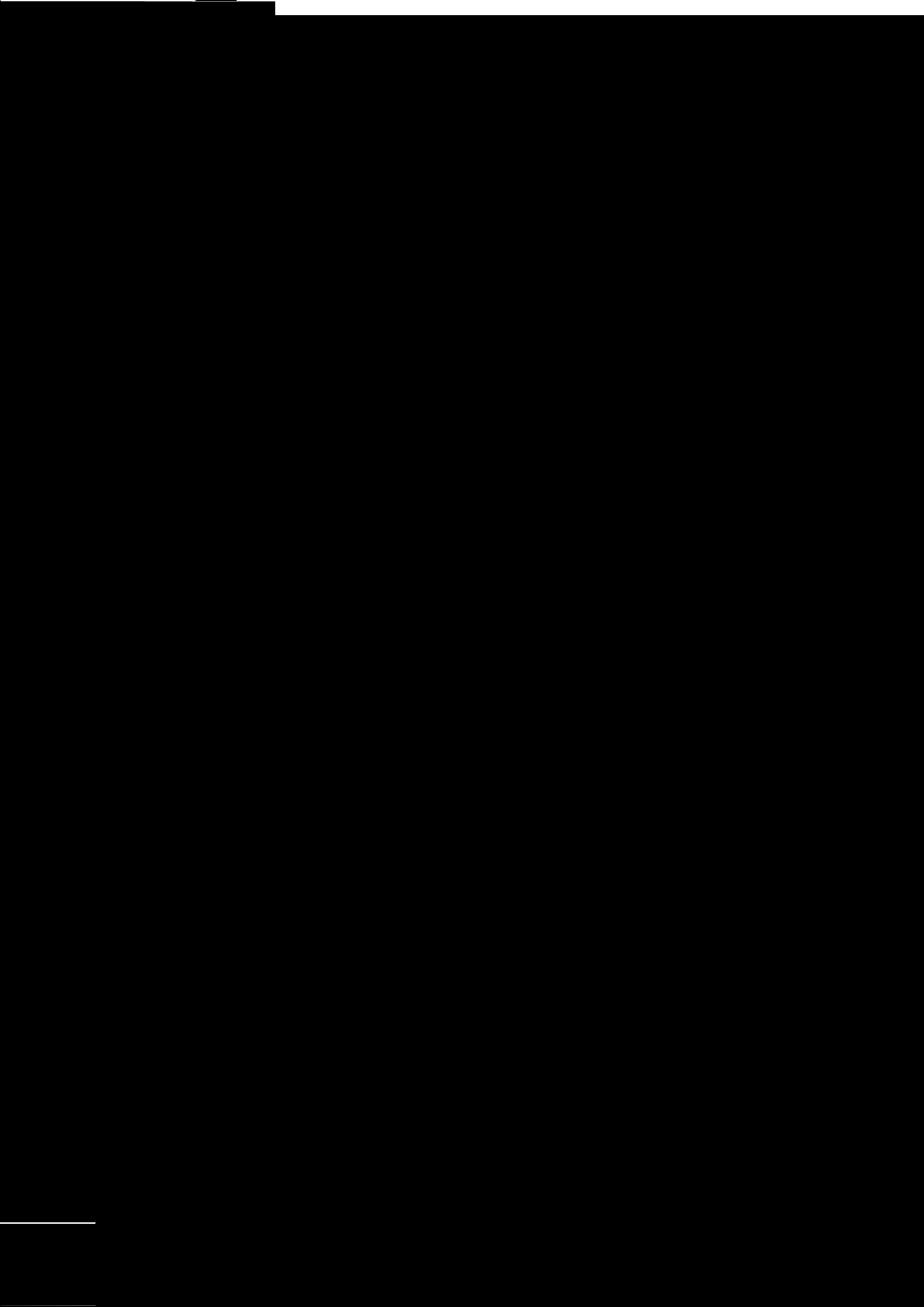
---

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

● WFARM1221S	Biochemistry and molecular biology ■	Nathalie Delzenne (coord.)	
--------------	--------------------------------------	----------------------------	--











- 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 [equivalence of your diploma](#) issued by the Wallonia-Brussels Federation (French Community of Belgium). If you have a restrictive equivalence for the programme of your choice, in addition of it, you **must** have either the [DAESn the](#)



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](#)

