

At Louvain-la-Neuve - 180 credits - 3 years - Day schedule - In French

CHIM1BA -

From the second year on, besides the major in Chemistry, the students will choose a minor or complete their programme with courses selected from among those on offer. There is a minor in Biology. The students may also choose another minor based on a project to be elaborated with the approval of the study advisor.

The possibility of selecting options helps the students to prepare for their future orientation.

Students are given the opportunity to elaborate a personal work project and to write a report summarising it.

Ongoing evaluations are organised with special attention paid to interdisciplinary comprehension of the subject matters.

Principal Subjects

Biochemistry (9 credits)

Biology (11 credits)

General Chemistry (16 credits)

Inorganic and Analytical Chemistry (17 credits)

Organic Chemistry (19 credits)

Physical Chemistry (12 credits)

The Chemistry of Polymers (2 credits)

Cristallography and Molecular Spectroscopy (8 credits)

Quantitative Processing of Chemical data (3 credits)

General Mathematics (18 credits)

General Physics (20 credits)

Earth Sciences (6 credits)

English (6 credits)

Human Sciences (5 credits)

Computing tools and Documentary Research or project (3 credits)

CHIM1BA Programme

Detailed programme by subject

o Mathématiques

o LMAT1101	Mathematics 1	Pedro Dos Santos Santana Forte Vaz	PS [q1] [30h +20h] [4 Credits]
o LMAT1102	Mathematics 2	Augusto Ponce	PS [q2] [30h +30h] [4 Credits]

o Biologie

o LBIO1110	Life : diversity and evolution	Patrick Dumont	PS [q1] [30h +10h] [4 Credits]
o LBIO1111	Cell and molecular biology	Patrick Dumont Charles Hachez	PS [q1] [30h +20h] [5 Credits]
o LBIO1112	Organism biology : plants and animals	Muriel Quinet Jean-François Rees	PS [q2] [30h +20h] [5 Credits]

o Physique

o LPHY1101	Physics 1	Michel Crucifix Thierry Fichet	PS [q1] [30h +40h] [6 Credits]
o LPHY1102	Physics 2	Vincent Lemaitre	PS [q2] [54h +36h] [7 Credits]




o Sciences de la terre

o LBIR1130	Introduction to Earth sciences	Pierre Delmelle (coord.) Sophie Opfergelt	PS [q2] [30h +30h] [5 Credits]
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o Anglais

o LANG1861	English: reading and listening comprehension of scientific texts		
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CHIM1BA - 2ND ANNUAL UNIT

- Credits]  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 Biochimie**

<input checked="" type="radio"/> LCHM1271	Elements of biochemistry	Patrice Soumillion	[FR] [q1] [30h +24h] [4 Credits] 
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o Chimie générale

<input checked="" type="radio"/> LCHM1211	General Chemistry 2	Yann Garcia Tom Leyssens	[FR] [q2] [45h +60h] [8 Credits] 
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o Chimie inorganique et analytique

<input checked="" type="radio"/> LCHM1231	Elements of inorganic and analytical chemistry	Sophie Hermans	[FR] [q2] [30h +50h] [5 Credits] 
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o Chimie organique

<input checked="" type="radio"/> LCHM1244	Organic chemistry 2: deepening of basic concepts	Olivier Riant	[FR] [q1] [30h +22.5h] [4 Credits] 
<input checked="" type="radio"/> LCHM1245	Organic Chemistry 2: Heteroatomic Chemistry	Michael Singleton	

o Anglais

LANG1862	English: reading and listening comprehension of scientific texts	Ahmed Adriouche (coord.) Catherine Avery Ariane Halleux (coord.) Adrien Kefer (compensates) Amandine Dumont	ES [q1] [30h] [3 Credits]
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o Sciences humaines

o Sciences religieuses

L'étudiant-e choisit 2 crédits parmi les cours suivants

LTECO2100	Sociétés, cultures, religions : Biblical readings	Hans Ausloos	ES [q1] [15h] [2 Credits]
LTECO2200	Societies-cultures-religions : Human Questions	Pedro Dusabamahoro Valinho Gomes	ES [q1] [15h] [2 Credits]
LTECO2300	Societies, cultures, religions : Ethical questions	Marcela Lobo Bustamante	ES [q1] [15h] [2 Credits]

o Minor or additional module

L'étudiant complète sa formation en choisissant un approfondissement ou une mineure dans la liste proposée pour le bachelier en sciences chimiques. Il répartit les unités d'enseignement dans le 2e et le 3e bloc annuel, de manière à ce que son programme annuel totalise 60 crédits.

Remarque : La mineure en sciences biomédicales se donnant sur le site de Woluwé, les étudiants qui souhaitent l'intégrer à leur programme devront faire face à des problèmes organisationnels (conflits horaires, ...)

Maximum 1 élément(s)

CHIM1BA - 3RD 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 Anglais

o LANG1863	English for Students in Sciences (Upper-Intermediate level)	Ahmed Adriouche (coord.) Catherine Avery (coord.) Amandine Dumont (coord.) Sandrine Jacob (coord.) Adrien Kefer (compensates) Amandine Dumont Nevin Serbest Florence Simon (coord.) Marine Volpe	EN
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CHIM1BA - 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:
 - not have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2024-2025, you must have obtained your diploma during the academic years 2021-2022, 2022-2023 ou 2023-2024. In the French Community of Belgium, the academic year runs from September 14 to September 13
 - not already hold an undergraduate degree
- Candidates, whatever their nationality, with a secondary school diploma **from a country outside the European Union**, must have obtained an average of 13/20 minimum or, failing that, have obtained this average, have passed one year of study in Belgium (for example special Maths / sciences). A non-successful year will not be taken into consideration.

- For any secondary school diploma

Teaching method

Des séances sont organisées au cours de la première année autour des questions de méthode de travail, par exemple la gestion du temps ou la manière d'aborder les différentes matières.

Les exercices et laboratoires sont organisés en petits groupes et sont encadrés par des assistants. Les monitorats permettent à ceux qui le souhaitent de faire le point sur les matières vues au cours : les enseignants de chaque discipline répondent aux questions des étudiants et expliquent les points moins bien compris.

La plupart des enseignements disposent également d'un site internet ou est déposée une série d'informations utiles pour l'étude.

Des cours au choix permettent aux étudiants de préparer leur orientation future.

La possibilité de réaliser un travail personnel et d'en rédiger un rapport de synthèse est offerte aux étudiants.

Outre des rapports à remettre ou des contrôles de connaissances au début de certaines séances de laboratoires, des interrogations obligatoires intervenant dans la note finale de chaque matière sont organisées après un mois de cours au premier quadrimestre.

Des évaluations continues sont mises en place avec une attention particulière sur la compréhension interdisciplinaire des matières.

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".

Différentes modalités sont mises en oeuvre pour l'évaluation des connaissances et des compétences acquises au cours de la formation; elles sont adaptées aux types de prestations : évaluation continue notamment pour les exercices pratiques, évaluation des travaux personnels et de groupe, évaluation globale (écrite et/ou orale) durant les sessions d'examens.

Mobility and/or Internationalisation outlook

International mobility is recommended rather within the framework of master programmes. In special cases, however, it is possible to consider international mobility at the end of the bachelor's degree.

Moreover, participation in a short mobility can be envisaged at the end of the bachelor's degree in the framework of the Athens network <https://www.paristech.fr/fr/international/europe/athens>

Possible trainings at the end of the programme

Positioning of the programme within the University cursus

The bachelor's degree in Chemical Sciences entitles automatic access to the master's programme in Molecular Chemistry, orientated towards the domains of applications, research or teaching.

Other studies accessible upon completion of the programme

If a minor in biology has been chosen, the bachelor's degree also access to the master's of Biochemistry and Molecular and Cellular Biology.

Contacts

Curriculum Management

Entity

Structure entity

Denomination

Faculty

Sector

Acronym

Postal address

SST/SC/CHIM

(CHIM)

Faculty of Science (SC)

Sciences and Technology (SST)

CHIM

Place Louis Pasteur 1 - bte L4.01.07

1348 Louvain-la-Neuve

Tel: +32 (0) 10 47 40 45 - Fax: +32 (0) 10 47 28 36

<https://uclouvain.be/fr/facultes/sc/chim>

Website

Academic supervisor: [Tom Leysens](#)

Jury

- President and Study advisor: [Benjamin Elias](#)
- Secretary: [Marc de Wergifosse](#)

Useful Contact(s)

- Administrative manager for the student's annual program: [Nathalie Micha](#)

