





**SINF1BA -**

4. communicate effectively in French orally and in writing to carry out the projects, use cleverly technical documents in English and understand the information transmitted orally in English

- Identify the needs of the customer who has a basic computer science culture: questioning, listening and understanding the client, keeping in mind the existence of non-technical dimensions;
- Argue and convince while adapting his communication to the language of the interlocutors: colleagues, clients, superiors;
- Communicate in graphical and schematic form, interpret a diagram, present the results of a task, structuring information;
- Read, analyse and use technical documentation (diagrams, tutorials, ...);
- Prepare written documents taking into account contextual requirements and social conventions (manual, documentation, project report);
- Make a persuasive oral presentation using modern communication techniques.

5. demonstrate both rigorous, open and critical mind in his work

- Apply the standards of its discipline (terminology, quality standards in terms of documentation and programming methods, ...);
- Demonstrate critical attitude with respect to a technical solution, checking robustness and relevance in its context of use;
- Develop autonomously learning to remain competent in his field.

## Programme structure

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The student who enrolls in the bachelor's programme in Computer Science will follow a programme of 180 credits, usually spread over 3 years. This programme includes a major of 150 credits and a minor of 30 credits.

- The major consists of a set of polyvalent courses of 79 credits in total and a set of Computer Science courses of 71 credits. The general polyvalent formation comprises a solid training in Economics, Management and Human Sciences (28 credits) as well as in Mathematics (32 credits).
- The major will be supplemented by a minor or an additional module in computer sciences of 30 credits, intended for students who wish to deepen their training in the discipline.
- Regarding the minor, UCL university proposes a large variety of minors in sciences (statistics, scientific culture,...) as well as in human sciences (philosophy, economy,...). For more details, please consult the following web-page : <https://uclouvain.be/fr/catalogue-formations/faculte-2024-epl.html>. Whereas, some minors are freely accessible by any student, some others are subject to certain accessibility conditions. When a student would like to access a minor but encounters certain problems, he or she is advised to contact his or her [student counsellor](#).

**The principal subjects addressed in this programme are :**

- Computer Science - 71 credits
- Mathematics- 32 credits
- Economics, Management and Human sciences - 28 credits
- Science and Techniques - 10 credits
- Religious Studies - 2 credits
- English - 7 credits
- Minor - 30 credits

## SINF1BA Programme

## Detailed programme by subject

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Year

1 2 3

○ LINFO1115	Reasoning about a highly connected world: graph theory, game theory and networks 🟡	Peter Van Roy	PO [q2] [30h+30h] [5 Credits] 🌐 > French-friendly			x
○ LINFO1101	Introduction to programming	Kim Mens Siegfried Nijssen Charles Pecheur	PO [q1] [30h+30h] [5 Credits] 🌐	x		
○ LINFO1103	Introduction to algorithms	Pierre Dupont	PO [q2] [30h+30h] [5 Credits] 🌐	x		
○ LINFO1104	Programming language concepts 🟡	Peter Van Roy	PO [q2] [30h+30h] [5 Credits] 🌐		x	
○ LINFO1121	Algorithms and data structures 🟡	Pierre Schaus	PO [q1] [30h+30h] [5 Credits] 🌐			x
○ LINFO1252	Informatic Systems 🟡	Etienne Riviere	PO [q1] [30h+30h] [5 Credits] 🌐			x
○ LINFO1123	Calculability, Logic and Complexity	Yves Deville	PO [q2] [30h+30h] [5 Credits] 🌐		x	
○ LINFO1341	Computer networks	Olivier Bonaventure	PO [q2] [30h+30h] [5 Credits] 🌐			x
○ LEPL1402	Informatics 2 🟡	Sébastien Jodogne Ramin Sadre Pierre Schaus	PO [q1] [30h+30h] [5 Credits] 🌐		x	
○ LINFO1501	Artificial Intelligence	Eric Piette (compensates Yves Deville)	PO [q2] [30h+30h] [5 Credits] 🌐			x
○ LEPL1503	Project 3	Olivier Bonaventure Axel Legay (coord.)	PO [q2] [30h+30h] [5 Credits] 🌐		x	
○		Tom Barbette	PO [q2] [30h+30h] [5 Credits] 🌐			



## List of available minors

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Besides the core study, students will choose:

- the Additional module in Computer Science
- or one of the minors in the list below.





## SINF1BA - 1ST ANNUAL UNIT

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- 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, ...)

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

### ⌘ German courses

⌘ LALLE1101	German beginner's level 1st part (0-A1)	Fanny Desterbecq (compensates Ann Rinder)	ES [q1 or q2] [45h] [2 Credits]
⌘ LALLE1102	German beginner's level 2nd part (A1 - A2)	Caroline Klein (coord.)	ES [q2] [45h] [2 Credits]

### ⌘ Spanish Courses

⌘ LESPA1101	Spanish beginner's level 1st part (0-A1)	Begona Garcia Migura Fernando Juan San Basilio Pardo Alicia Maria Tirado Fernandez (coord.)	ES [q1 or q2] [45h] [2 Credits]
⌘ LESPA1102	Spanish (beginner's level) 2nd part (A1 - A2)	Alicia Maria Tirado Fernandez (coord.)	ES [q1 or q2] [45h] [2 Credits]

### o Computer science training

En bloc annuel 3, l'étudiant doit choisir l'un des trois projets suivants dans son programme de 180 crédits en bachelier: LEPL1509, LEPL1511 ou LSST1001. Les projets LEPL1511 et LSST1001 sont ouverts sur candidature et après sélection uniquement.

o LINFO1101	Introduction to programming	Kim Mens Siegfried Nijssen Charles Pecheur	ES [q1] [30h +30h] [5 Credits]
o LINFO1103	Introduction to algorithms	Pierre Dupont	ES [q2] [30h +30h] [5 Credits]
o LINFO1002	IT projects 2	Tom Barbette	ES [q2] [30h +30h] [5 Credits]
o LINFO1001	IT projects 1	Cristel Pelsser	ES [q1] [30h +30h] [6 Credits]



⌘ LESPA1302	Spanish intermediate level, 2nd part (B1.1-B1.2)	Alicia Maria Tirado Fernandez (coord.)	ES [q2] [45h] [3 Credits] 🌐
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**O Religion courses for students in exact sciences**

The students select one course between:

⌘ LTECO2100	Sociétés, cultures, religions : Biblical readings	Hans Ausloos	ES [q1] [15h] [2 Credits] 🌐
⌘ LTECO2300	Societies, cultures, religions : Ethical questions	Marcela Lobo	

## **SINF1BA - 3RD ANNUAL UNIT**

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- 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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⌘ LEPL1509

Project 4 (in informatics) 🟡

Hélène Verhaeghe

📅 [q2]  
[30h  
+22.5h] [5  
Credits] 🌐

## SINF1BA - 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 **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 [DAES](#) or a certificate of successful completion of the [examination giving access to 1<sup>st</sup> cycle studies](#) when you submit your application

## Access based on validation of professional experience

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

## Special requirements to access some programmes

- 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 courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.

- Admission to **undergraduate studies in veterinary medicine**



- Secrétaire du Jury: [Cristel Pelsser](#)
- Président du Jury: [Claude Oestges](#)

Useful Contact(s)

- Secrétariat: [Cindy De Saeger](#)
- Conseillère aux études en sciences informatiques: [Cécile Lombart](#)

