SINC1BA - Introduction

Introduction

Introduction

Computer science, or more generally information and communications technology (ICT), is everywhere; everyone uses computers/ smartphones/… to communicate, work, study, play, travel, and manage. More and more activities are assisted by computers. SMEs, public services, education world, associations, leisure, in two …

Your profile

You

• have a taste for problem solving;

• are pushed by a great curiosity;

• overflow of creativity and imagination;

• are a head for abstraction, analysis and synthesis;

• have a methodical mind and show rigor in your reasoning;

• are good for human contact, organization of teamwork, leadership, etc.

Following a strong mathematical option during high school and feeling an attraction to science or economics are assets.

Your future job

During his career, the computer scientist will flourish and evolve in one or more of the following profiles:

• The designer identifies the needs of the future user and determines the technical means useful to fulfil these needs. He is able to speak "the language" of the customer, it has a fairly broad culture to interact successfully with non-computer experts. He masters computer technology to identify the best solution. It builds a quality architecture for this solution.

• The achiever is able to translate the indications and guidelines produced by the designer in computer components. He analyses in detail some components of the architecture, he programs, tests, deploys these components into an integrated solution. His technical expertise is very sharp.

• The IT project manager takes care of the smooth running of the project; he is responsible for the completion of the tasks associated with these systems, their safety, planning their development. As the designer, it has He an.of tn

- LSINC1231 - Biochemistry
- LSINC1211

[redacted]

[redacted] en mathématiques et science des données

[redacted]	Analysis	Geovani Nunes Grapiglia	FR [q1] [30h +30h] [5 Credits]
LSINC1112	Algebra	Stéphanie Guérit	FR [q2] [30h +30h] [5 Credits]

[redacted]

Formation en sciences du vivant

LSINC1131	General and Organic Chemistry	Karine Glinel Patricia Luis Alconero	FR [q1] [30h +30h] [5 Credits]
LSINC1132	General biology		FR [q1] [30h +30h] [5 Credits]
LSINC1311			FR [q2] [30h +30h] [5 Credits]

[redacted]

[redacted]

SINC1BA - 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...)

Content:

Formation en informatique

LSINC1402	Computer Science 2	Sébastien Jodogne Ramin Sadre	FR [q1] [30h +30h] [5 Credits]
LSINC1201	Interaction and Visualization Techniques		FR [q1] [30h +30h] [5 Credits]
LSINC1123	Calculability, Logic and Complexity	Maxime Parmentier (compensates Yves Deville)	FR [q2] [30h +30h] [5 Credits]
LSINC1104	Programming Paradigms and Concurrency	Peter Van Roy	FR [q2] [30h +30h] [5 Credits]
LSINC1503	Project 3 in Computer Science: Improvement of Algorithms Efficiency	Olivier Bonaventure Lionel Metongnon	FR [q2] [30h +30h] [5 Credits]
LSINC1313	Numerical algorithmic	Sébastien Jodogne Estelle Massart	FR [q1] [30h +30h] [5 Credits]

Formation en mathématiques et science des données

LSINC1113	Additional Mathematics	Benoît Legat	FR [q1] [30h +30h] [5 Credits]
LSINC1211	Probability and Statistics		FR [q2] [30h +30h] [5 Credits]

Formation en langues et sciences humaines

LSINC1241	Law, Ethics and Technology		FR [q2] [30h +30h] [5 Credits]
LANGL1183	English for Computer Scientists II	Lucille Meyers (coord.)	EN [q1] [30h] [5 Credits]

Minor or additional module

The student completes his training with the additional module in computer science or the additionel module in life sciences and health for computer scientists.
Maximum 1 element(s)

SINC1BA - 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]

- 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 1st 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**

  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).

  Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit an aptitude test (fr).
- Access to **Bachelor of Science in Business Engineering**

  The Bachelor of Science in Business Engineering is a joint program organised by KU Leuven and UCLouvain Saint-Louis Bruxelles. In order to register, all candidate must first submit an application via the KU Leuven admission platform. The conditions of access to this programme are specific.

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".

Contacts

Curriculum Management

Entity

Structure entity	SST/EPL/INFO
Denomination	(INFO)
Faculty	Louvain School of Engineering (EPL)
Sector	Sciences and Technology (SST)
Acronym	INFO
Postal address	Place Sainte Barbe 2 - bte L5.02.01 1348 Louvain-la-Neuve