SINC1BA - Introduction

Introduction

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Computer science, or more generally information and communications technology (ICT), is everywhere; everyone uses computers/

List of available minors

> Additional module in computer science *[en-prog-2024-appsinf]*
> Additional module in life sciences and health for computer scientists *[en-prog-2024-appscvs]*

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 puposes 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.
- transform a prerequisite into a corequisite if the student is in the final year of a degree course.

For more information, please consult the Academic Regulations and Procedures.

 # Prerequisities list

LANGL1183 "Anglais pour informaticiens II" has prerequisite(s) LANGL1182
- LANGL1182 - English for Computer Scientists

LANGL1184 "Anglais pour informaticiens III" has prerequisite(s) LANGL1183
- LANGL1183 - English for Computer Scientists II

LSINC1104 "Concepts des langages de programmation" has prerequisite(s) LSINC1101
- LSINC1101 - Computer Science 1: Introduction to Programming

LSINC1113 "Compléments de mathématiques" has prerequisite(s) LSINC1111
- LSINC1111 - Analysis

LSINC1114 "Analyse de données biologiques" has prerequisite(s) LSINC1101 ET LSINC1111 ET LSINC1002
- LSINC1101 - Computer Science 1: Introduction to Programming
- LSINC1111 - Analysis
- LSINC1002 - Project 2 in Computer Science: Design of an Interactive Website

LSINC1121 "Algorithmique et structure de données" has prerequisite(s) LSINC1402
- LSINC1402 - Computer Science 2

LSINC1201 "Techniques d'interaction et de visualisation" has prerequisite(s) LSINC1101
- LSINC1101 - Computer Science 1: Introduction to Programming

LSINC1211 "Probabilités et statistiques" has prerequisite(s) LSINC1111 ET LSINC1112
- LSINC1111 - Analysis
- LSINC1112 - Algebra

LSINC1231 "Biochimie" has prerequisite(s) LSINC113 176 rg BT /F1 8 Tf400000rD0140.91p7so5b studOooe"

- LSINC1231 - Biochemistry
- LSINC1211 - Probability and Statistics

LSINC1361 "Intelligence artificielle" has prerequisite(s) LSINC1103 ET LSINC1402

- LSINC1103 - Introduction to Algorithmics
- LSINC1402 - Computer Science 2

LSINC1402 "Informatique 2" has prerequisite(s) LSINC1101

- LSINC1101 - Computer Science 1: Introduction to Programming

LSINC1503 "Projet 3: amélioration de l'efficacité d'algorithmes" has prerequisite(s) LSINC1101

- LSINC1101 - Computer Science 1: Introduction to Programming

LSINC1509 "Projet 4: application des bases de données" has prerequisite(s) LSINC1402

- LSINC1402 - Computer Science 2

The programme's courses and learning outcomes

For each UCLouvain training programme, a reference framework of learning outcomes specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

Detailed programme per annual block

SINC1BA - 1ST ANNUAL UNIT

O 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

O LSINC1101	Computer Science 1: Introduction to Programming	Kim Mens

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

[FR] 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] Teaching language (FR, EN, ES, NL, DE, ...)

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

Content:

Formation en informatique

LSINC1121	Algorithms and data structure		[FR] [q1] [30h+30h] [5 Credits]
LSINC1252	Informaticals Systems	Etienne Riviere	[FR] [q1] [30h+30h] [5 Credits]
LSINC1301	Databases and modeling		[FR] [q1] [30h+30h] [5 Credits]

- 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 su7ruhesethe knowledge an prtie