UCL Study programme 2026 - 2027

Minor in Computer Sciences

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Learning outcomes

The aim of the minor in computer science is to equip the student with the basic concepts in computer science. To be more specific, s/he should:

- Master the basic foundations of computer science (programming, algorithms and data structures, computer languages, information systems,...)
- Analyze and solve medium-sized computing and IT problems by applying the acquired knowledge from different computer science domains.

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

- Acquire and demonstrate an understanding of a knowledge base of the main disciplines that make up computer science in order to grasp its specific features.
- Demonstrate knowledge and understanding of the basic tools of computer science.
- Discover and grasp the rigor required by computer science, and demonstrate this integration.
- Demonstrate a capacity for formalism/reasoning specific to computer science.
- Perceive the specificities of computer science (and the contributions of such an outlook) and construct a reflection complementary to that of the discipline of one's major in order to enrich the study of computer science.

Programme

DETAILED PROGRAMME BY SUBJECT

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

30 crédits

				Year 2	Year 3
Content:					
Programme					
L'étudiant·e choisit un cours parmi les trois suivants :					
Optional LINFO1101	Introduction to programming	Kim Mens Charles Pecheur Cristel Pelsser	FR [q1] [30h+30h] [5 Credits]	x	
Optional LEPL1401	Informatics 1	Kim Mens Charles Pecheur Cristel Pelsser	FR [q1] [30h+30h] [5 Credits]	x	
Optional LSINC1101	Computer Science 1: Introduction to Programming	Kim Mens Charles Pecheur Cristel Pelsser	FR [q1] [30h+30h] [5 Credits]	x	
Cours au choix de la mineure en sciences informatiques					
Optional LINFO1116	Logic	Eric Piette	FR [q1] [30h+30h] [5 Credits]	x	
Optional LINFO1311	Human Machine Interface	Jean Vanderdonckt	FR [q2] [30h+15h] [5 Credits]	x	
Optional LINFO1140	Principles of computer operation	Olivier Bonaventure	FR [q2] [30h+30h] [5 Credits]	x	
Optional LINFO1006	Database and information representation	Quentin Cappart	FR [q2] [30h+30h] [5 Credits]	x	

				Year 2	3
⊠ LINFO1103	Introduction to algorithms	Pierre Dupont	FR [q2] [30h+30h] [5 Credits]	x	
⊠ LINFO1002	IT projects 2		FR [q2] [30h+30h] [5 Credits]	x	
⊠ LINFO1104	Programming language concepts		FR [q2] [30h+30h] [5 Credits]		x
⊠ LINFO1113	Numerical algorithmic	Sébastien Jodogne	FR [q2] [30h+30h] [6 Credits]		x
⊠ LINFO1114	Discrete structures		FR [q1] [30h+15h] [5 Credits]		x
⊠ LINFO1341	Computer networks	Olivier Bonaventure (coord.) Cristel Pelsser	FR [q2] [30h+30h] [5 Credits]		x
⊠ LEPL1402	Informatics 2	Sébastien Jodogne Ramin Sadre Pierre Schaus	FR [q1] [30h+30h] [5 Credits]		x

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.

MINSINF - Information

Teaching method

Students play an active role in their own training

Students benefit from a program based on active teaching, inviting everyone to play a central role in their own training. To achieve this, a variety of teaching methods are used throughout the year, including :

- Lectures
- Concrete projects
- Exercise sessions
- Individual and group work

These approaches place students at the heart of their learning, fostering the development of the skills and attitudes they need to succeed in their minor.

Evaluation

The evaluation methods comply with the Academic regulations and procedures. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

Teaching activities are assessed in accordance with the University's rules and regulations (see Study and Examination Regulations).

To obtain the average, the marks obtained for the teaching units are weighted by their respective credits.

An examination session is held at the end of each term: in January, June and September.

Examinations failed in January can only be retaken in September.

Most courses include at least one assessment during the term (continuous assessment).

Assessments are either written or oral. Specific assessment procedures for all courses are announced at the start of each term. In particular, certain projects and assignments to be completed during the term cannot be repeated in another term.

To find out more about assessment procedures, students are invited to consult the activity description sheet.

Possible trainings at the end of the programme

If the bachelor's degree obtained includes probability/statistics courses, 6 courses will have to be added to the master's degree (partly in place of electives)

- LINFO1121 Algorithms and data structures
- LINFO1252 Computer systems
- LINFO1131 Concurrent programming paradigms
- LINFO1104 Concepts, paradigms and semantics of programming languages
- LINFO1123 Computability, logic and complexity
- LINFO1115 Reasoning About a Highly Connected World: graph theory, game theory and networks

The Master [120] in Computer Science will take around 130 credits to complete (typically 2 years - 2.5 years).

The Master [60] in Computer Science will take about 90 credits to complete (typically 1.5 years).

Contacts

Curriculum Management

Entity

Structure entity	SST/EPL/INFO
Denomination	(INFO)
Faculty	Louvain School of Engineering (EPL)
Sector	Sciences and Technology (SST)
Acronym	INFO
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Useful Contact(s)

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