

Master [60] in Computer Science

At Louvain-la-Neuve - 60 credits - 1 year - Day schedule - In English

Dissertation/Graduation Project : **YES** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **optional**

Activities on other sites: NO Main study domain : Sciences

Organized by: Louvain School of Engineering (EPL)

Programme acronym: SINF2M1 - Francophone Certification Framework: 7

Table of contents

Introduction Teaching profile	 	2	

SINF2M1 - Introduction

Introduction

Introduction

The objective of this Master's degree programme is to train computer science professionals capable of understanding and analysing the complex needs of a company, of designing computing systems that meet those needs, of mastering the rapidly evolving technological tools in this area, of implementing solutions, of assuring quality products and procedures in a company.

Your profile

You would like to

- Imagine, design, and implement computer science systems that will shape the future;
- continue your education beyond the Bachelor's degree with a major in computer sciences (or the equivalent);
- improve your theoretical knowledge and develop your technical expertise in fields like artificial intelligence, computer networks, information security, software engineering and programming systems;
- improve your interdisciplinary knowledge in areas such as foreign languages, resource management, teamwork, autonomy and ethics.

Your future job

We train

- professionals who will design computer systems that meet users' needs;
- innovators who can master a wide range of constantly evolving technologies:
- specialists capable of implementing software solutions with particular attention paid to product quality and its development process.

Your programme

This Master's degree programme consists of

- a core curriculum aiming to provide the knowledge and skills necessary to model and design complex applications. Topics covered include artificial intelligence, computer networking, software engineering, compilers and data bases;
- general knowledge courses such as classes in management and human resources (as a comprehensive university, UCLouvain offers numerous general knowledge courses according to student interest);
- a graduation project that offers students the possibility to study a subject in-depth and thanks to its size, introduces students to the professional life of a computer scientist or researcher; the topic of this project is selected in consultation with the programme supervisors and possibly a company.

Programme structure

The student's master's program 60 in computer science will total a minimum of 60 credits distributed over an annual block comprising a common core (21 credits), a final thesis (15 credits) and units of elective course (24 credits).

This programme may vary depending on students' prior course of study. If during their previous studies, students have already taken a required class or completed an equivalent activity, they may substitute this course with an activity of their choice from the Master's degree programme (120) in computer science (provided they follow the programme guidelines). They will also verify that the minimum number of required credits for their diploma has been obtained.

Such programmes will be submitted to the appropriate programme commission for approval.

The majority of courses in this programme are offered in English. For non-Francophone students, alternative courses will be suggested by the programme commission as substitutes for required courses taught in French. This will be done on a case by case basis depending on the student's curriculum.

It is always possible for students to speak in French in class or during evaluations. Specifically, the graduation thesis/project may be written and defended in either English or French.

For students coming from bachelor's degrees in management information technology or computer science and systems from the Hautes Ecoles in FWB, the program also includes an additional module comprising 45 credits which must be taken as a priority during the first registration in the master's degree. Including this complementary module, the student's complete program should reach 105 credits spread over 2 annual blocks.

SINF2M1 Programme

Detailed programme by subject

UCL - Université catholique de Louvain Study Programme 2024-2025

SINF2M1: Master [60] in Computer Science

UCL - Université catholique de Louvain Study Programme 2024-2025

SINF2M1: Master [60] in Computer Science

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.

SINF2M1 - Information

Access Requirements

Master course admission requirements are defined by the French Community of Belgium Decree of 7 November 2013 defining the higher education landscape and the academic organisation of courses.

General and specific admission requirements for this programme must be satisfied at the time of enrolling at the university.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed in this table or on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.

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
- > University Bachelors
- > Non university Bachelors
- > Holders of a 2nd cycle University degree
- > Holders of a non-University 2nd cycle degree
- > Access based on validation of professional experience
- > Access based on application
- > Admission and Enrolment Procedures for general registration

Specific access requirements

This programme is taught in English with no prerequisite in French. See selection criteria of the personalized access.

University Bachelors

Diploma	Special Requirements	Access	Remarks		
UCLouvain Bachelors					
Bachelor in Computer Science (Louvain-la-Neuve)		Direct access			
Bachelor in Computer Science (Charleroi)		Direct access			
Bachelor in Economics and Management Bachelor in Mathematics Bachelor in Engineering : Architecture	Minor in Computer Sciences	Access with additional training	maximum 60 additional credits integrated into their Master's degree programme. If the UCLouvain Admissions Office considers the enrolment application sufficiently complete, it will submit the application to the faculty for a decision.		
Others Bachelors of the French speaking Community of Belgium					
Bachelier en sciences informatiques		Direct access			
Bachelors of the Dutch speaking Community of Belgium					
Bachelor in de informatica		Direct access			
Foreign Bachelors					
Bachelor in Computer Sciences		Access based on application	See "Personalized Access"		

Non university Bachelors

> Find out more about links to the university

Diploma	Access	Remarks
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BA en informatique de gestion - crédits supplémentaires entre 30 et 60

BA en informatique et systèmes, orientation informatique industrielle - crédits supplémentaires entre 30 et 60

BA en informatique et systèmes, orientation réseaux et télécommunications - crédits supplémentaires entre 30 et 60

BA en informatique et systèmes, orientation sécurité des systèmes - crédits supplémentaires entre 30 et 60

BA en informatique et systèmes, orientation technologie de l'informatique - crédits supplémentaires entre 30 et 60

BA en informatique, orientation développement d'applications - crédits supplémentaires entre 30 et 60

BA en informatique, orientation informatique industrielle - crédits supplémentaires entre 30 et 60

BA en informatique, orientation réseaux et télécommunications - crédits supplémentaires entre 30 et 60

BA en informatique, orientation sécurité des systèmes - crédits supplémentaires entre 30 et 60

BA en informatique, orientation technologies de l'informatique - crédits supplémentaires entre 30 et 60

Les enseignements supplémentaires éventuels peuvent être consultés dans le module complémentaire. Type court

Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			

Masters

Holders of a non-University 2nd cycle degree

Access based on validation of professional experience

> It is possible, under certain conditions, to use one's personal and professional experience to enter a university course without having the required qualifications. However, validation of prior experience does not automatically apply to all courses. Find out more about Validation of priori experience.

Access based on application

Access based on application: access may be granted either directly or on the condition of completing additional courses of a maximum of 60 ECTS credits, or refused.

The first step of the admission procedure requires to submit an application online: https://uclouvain.be/en/study/inscriptions/futurs-etudiants.html.

Selection criteria are summarized here (contact: epl-admission@uclouvain.be).

Pending the publication of the 2025-2026 study programme (expected in early March), the selection criteria for 2025-2026 are now available

Admission and Enrolment Procedures for general registration

Entity

Structure entity Denomination Faculty Sector

Acronym Postal address

Academic supervisor: Ramin Sadre

Jury

Président du Jury: Claude Oestges
Secrétaire du Jury: Cristel Pelsser

Useful Contact(s)

• Secrétariat: Vanessa Maons

• Secrétariat facultaire: master-epl-sinf@uclouvain.be

• Study advisor: Cécile Lombart

SST/EPL/INFO

(INFO)

Louvain School of Engineering (EPL) Sciences and Technology (SST)

INFO

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