



## CHIM2M - Introduction

### Introduction

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#### Introduction

This master's degree trains top-level scientists able to solve contemporary problems linked to chemistry; it provides a solid theoretical formation and develops experimental ability, synthetic and critical way of thinking, as well as the rigour of scientific reasoning and expression.

The completion of a final year dissertation (master thesis) in one of the laboratories of the Institute of Condensed Matter and Nanosciences or the Institute of Biomolecular Science and Technology furthermore constitutes an initiation to research, opening the door to a potential doctorate.

#### Your profile

You

- want to help solve the great challenges of our time by creating new molecules with novel properties
- would like to work in university or public research institutes, in industrial laboratories,
- wish to develop experimental tools and sharp knowledge in advanced chemistry,
- envision to teach chemistry in upper secondary education classes.

#### Your future job

Chemistry is constantly developing and offers many job prospects. Industry is one of the largest employers: petrochemicals, pharmaceuticals, biotechnology, plastics and polymers, paint manufacturing, cosmetics, dyes, waste recycling, etc.

The chemist also puts his-her skills at the service of research (research institutes or industrial laboratories). Chemistry also opens up career opportunities in education, computer science, banking and insurance and other sometimes unsuspected professions. The environment is now an increasingly demanding sector.

#### Your programme

This master offers you

- a solid theoretical training in the fundamental orientations of chemistry ;
- high experimental and advanced research skills in chemistry;
- great freedom in setting up your program;
- an opportunity to test your skills in the field, in a research lab, in industry or in a high school class;
- the possibility of completing your internship or part of your Master's degree abroad.



8.1 Faire preuve de l'acquisition des approches méthodologiques et technologiques de pointe en relation avec les pratiques du monde de l'entreprise

8.2 Utiliser les compétences acquises au cours du Master dans un environnement nouveau et porteur au sein d'une entreprise au sens large

## Programme structure

The program consists of a common core of 90 ECTS (credits), and a more focused training of 30 credits (to be chosen between "in-depth", "didactic" or "specialized: industrial chemistry"). Note that the core curriculum counts 19 optional course credits.

The students in chemistry also have the possibility to register to the CPME focus: "[Interdisciplinary Program in Entrepreneurship](https://uclouvain.be/en/faculties/lsm/cpme) (<https://uclouvain.be/en/faculties/lsm/cpme>)".

## CHIM2M Programme

## Detailed programme by subject

### CORE COURSES [90.0]

- Mandatory
- ✘ Optional
- △ Not offered in 2023-2024
- ⊙ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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...)

Year


1 2

### o Cours de formation disciplinaire générale (27 credits)

- |            |                                       |
|------------|---------------------------------------|
| ● LCHM2120 | Analytical Chemistry II and exercises |
|------------|---------------------------------------|

**0 deux cours parmi les quatre suivants : (6 credits)**

⌘ LCHM2151	Advanced mass spectrometry	Charles-André Fustin	EN [q1] [22.5h+7.5h] [3 Credits]
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				Year	
				1	2
⌘ LCHM2247	Supramolecular chemistry	Charles-André Fustin Michael Singleton	EN [q2] [22.5h+7.5h] [3 Credits]  > <i>French-friendly</i>		x



o **Content:**

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o **Module concevoir, planifier et évaluer des pratiques d'enseignement et d'apprentissage**

o LSCI2320







**PROFESSIONAL FOCUS : INDUSTRIAL CHEMISTRY [30.0]**

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Year

1 2

**o Content:**

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● LCHM2275	Stage en entreprise		EN
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## INEO (EX-CPME), INTERDISCIPLINARY TRAINING IN ENTREPRENEURSHIP

- Mandatory
- ⊗ Optional
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- ⊖ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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...)

This option lasts 2 years and is integrated into more than 30 Masters programs in 9 faculties/schools of the UCLouvain. The choice of this option implies the realization of an interfaculty dissertation (in team) on a business creation project. Access is limited to students selected on the basis of a portfolio. More info. via <https://uclouvain.be/en/study/ineo>

Admission to this CPME option is subject to selection, please submit your application in due time <https://uclouvain.be/fr/etudier/ineo/admission.html>

Courses in this option cannot be taken individually outside of the option.

From 20 to 25credit(s)

Year

1 2

### Content:

				Year
⊗ LINEO2021	<b>Financer son projet</b> Ce cours est obligatoire pour les étudiants qui n'ont pas de prérequis en gestion (les étudiants qui ont suivi la mineure en gestion, ou la mineure en esprit d'entreprendre sont dispensés de ce cours).	Yves De Rongé Philippe Grégoire (compensates Yves De Rongé)	FR [q2] [30h+15h] [5 Credits] 🌐	X
● LINEO2001	<b>Théorie de l'entrepreneuriat</b>	Frank Janssen	FR [q1] [30h+20h] [5 Credits] 🌐	X
● LINEO2002	<b>Aspects juridiques, économiques et managériaux de la création d'entreprise</b>	Yves De Cordt Marine Falize	FR [q1] [30h+15h] [5 Credits] 🌐	X
● LINEO2004	<b>Séminaire d'approfondissement en entrepreneuriat</b>	Frank Janssen	FR [q2] [30h+15h] [5 Credits] 🌐	X
● LINEO2003	<b>Plan d'affaires et étapes-clefs de la création d'entreprise</b>	Frank Janssen	FR [q2] [30h+15h] [5 Credits] 🌐	X

## Mathematics 1

- Mandatory
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⊗ LMAT1101	Mathematics 1	Pedro Dos Santos Santana Forte Vaz	🇫🇷 [q1] [30h+20h] [4 Credits] 🌐
⊗ LMAT1102	Mathematics 2	Augusto Ponce	🇫🇷 [q2] [30h+30h] [4 Credits] 🌐



## Course prerequisites

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There are no prerequisites between course units (CUs) for this programme, i.e. the programme activity (course unit, CU) whose learning outcomes are to be certified and the corresponding credits awarded by the jury before registration in another CU.

## The programme's courses and learning outcomes

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



BA en chimie, orientation biochimie - crédits supplémentaires entre 45 et 60  
 BA en chimie, orientation biotechnologie - crédits supplémentaires entre 45 et 60  
 BA en chimie, orientation chimie appliquée - crédits supplémentaires entre 45 et 60  
 BA en chimie, orientation environnement - crédits supplémentaires entre 45 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
<b>"Licenciés"</b>			
		Direct access	
<b>Masters</b>			
		Direct access	

## 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 in the procedure is to submit a file online ( see <https://uclouvain.be/en/study/inscriptions/futurs-etudiants.html>).

Students who wish to be admitted on the basis of a dossier are invited to consult the [criteria for the evaluation of application](#).

## Admission and Enrolment Procedures for general registration





## Possible trainings at the end of the programme

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Whatever focus is chosen, the Master in Chemistry gives direct access to the doctorate in science.

## Contacts

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### Additional information

You will find additional information

- on the website of the School of Chemistry <https://uclouvain.be/fr/facultes/sc/chim>
- on the website of the Faculty of Science <https://uclouvain.be/en/faculties/sc>

### Curriculum Management

Entity

Structure entity

SST/SC/CHIM

Denomination

(CHIM)

Faculty

Faculty of Science (SC)

Sector

Sciences and Technology (SST)

Acronym

CHIM

Postal address

Place Louis Pasteur 1 - bte L4.01.07

1348 Louvain-la-Neuve

Tel: +32 (0) 10 47 40 45 - Fax: +32 (0) 10 47 28 36

<https://uclouvain.be/fr/facultes/sc/chim>

Website

Academic supervisor: Tom Leyssens (<https://uclouvain.be/repertoires/tom.leyssens>)

Jury

- President: Jean-François Gohy (<https://uclouvain.be/repertoires/jean-francois.gohy>)
- Secretary and study advisor: Tom Leyssens (<https://uclouvain.be/repertoires/tom.leyssens>)

Useful Contact(s)

- Administrative manager for the student's annual program: Fatuma Tapatondele (<https://uclouvain.be/repertoires/fatuma.tepatondele>)

