

At Louvain-la-Neuve - 30 credits - 1 year - Day schedule - In FrenchDissertation/Graduation Project : **NO** - Internship : **YES**Activities in English: **NO** - Activities in other languages : **NO**Activities on other sites : **YES**Main study domain : **Sciences**Organized by: **Faculty of Science (SC)**Programme acronym: **CHIM2A** - Francophone Certification Framework: 7**Table of contents**

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CHIM2A - Introduction

Introduction

Introduction

ATTENTION :

Cette formation n'est plus ouverte aux nouvelles inscriptions. Les personnes qui y étaient inscrites avant 2025 peuvent cependant s'y réinscrire pour la terminer. Les étudiants réinscrits en 2025-26 qui n'auront pas obtenu leur diplôme à l'issue de 2025-26 auront l'année académique 2026-27 pour valider les unités d'enseignement manquantes. Si le diplôme n'est pas acquis fin 2026-27, il faudra alors s'inscrire dans un Master en enseignement section 5.

Dès septembre 2025, pour vous former à enseigner à partir de la 4^{ème} année de l'enseignement secondaire, il vous faut entamer

- soit un master en enseignement section 4 (120 crédits), après un bachelier disciplinaire (180 crédits)
- soit un master en enseignement section 5 (60 crédits), après un master disciplinaire (60 ou 120 crédits)

Voir la [liste des Masters en enseignement](#).

CHIM2A - Teaching profile

Learning outcomes

1. Vision of the diploma

Teaching chemistry to students in secondary education, such is the challenge that the aggregation student (didactics course) prepares to face. The vision of aggregation in chemistry (didactics course) is to provide him or her with an initial training that will enable the student to mobilize the necessary skills to start out effectively in the profession of teacher and to develop positively.

Today's teachers are called on to play an essential role for their students, so say the "mission decrees" of 24 July 1997:

- to promote self-confidence and the development of the person of each student;
- to show the students how to assimilate knowledge and acquire the skills to make them able to learn throughout their lives and take an active place in economic, social and cultural life;
- to prepare all students to become responsible citizens, capable of contributing to the development of a democratic, solidarist, pluralist society open to other cultures;
- to guarantee all students equal opportunities for social emancipation.

The initial teacher training is based on the command of existing skills and abilities (developed in part in the core of the programme) that the student must mobilize and developing through different aggregation activities (didactics course):

- the knowledge and discipline(s) to be taught;
- clear, correct communication in the language of teaching, both oral and written;
- a critical, autonomous relation with the reference knowledge (scientific and cultural);
- relational capacities associated with the profile of the profession;
- a rich general knowledge and an openness to the diversity of cultures allowing future students to be made receptive to the world;
- the concern of participating in the role of democratization of the school.

2. The referential of skills and abilities acquired through training defining the output profile of diplomas on completion of aggregation in chemistry (didactics course)

At the end of the programme of aggregation in chemistry (didactics course) the graduate will have acquired and demonstrated command of the knowledge and skills mentioned below. These latter are defined in reference in the Decree of 8 February 2001 on the initial training for upper secondary education aggregation.

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

1. Intervening in a school context, in partnership with different actors.

- 1.1. Situating and appropriating the role assigned to the teacher within the school institution, with reference to the legal texts.
- 1.2. Mobilizing knowledge in human sciences for a correct interpretation of situations experienced in and around the classroom and for a better adaptation to school publics.
- 1.3. Mastering and mobilizing the communicational and relational skills essential for exercising the profession of teacher.
- 1.4. Dialoguing and collaborating constructively with the education partners involved in the training activities (in seminars and training courses: headmasters, supervisors, course leaders and other persons in the training course).

2. Teaching in authentic, varied situations.

- 2.1. Integrating teaching attitudes and behaviours on the service of the individual and collective training and the management of the class group.
- 2.2. Acquiring and using the didactics and disciplinary epistemology that guide pedagogic action.
- 2.3. Transposing reference learned knowledge and cultural practices into taught knowledge.
- 2.4. Conceiving and planning teaching-training situations, including assessment, according to the students concerned and in connection with the skills referentials and programmes.
- 2.5. Steering and adjusting the implementation of teaching-training situations.
- 2.6. Being capable of commanding new disciplinary and interdisciplinary knowledge to be taught.
- 2.7. Exploring new approaches and disciplinary, interdisciplinary and technological pedagogic tools.
- 2.8. In more specific (or complementary) way, for the teaching of chemistry, the graduate is capable of maîtriser différents outils et stratégies pour apprendre aux élèves à produire des commentaires personnels et autonomes.

3. Exercising critical faculties and pursuing a logic of continuous development.

- 3.1. Measuring the main ethical issues in connection with day-to-day practice.
- 3.2. Challenging one's initial representations and conceptions with a view to developing them.
- 3.3. Adopting a reflective attitude on one's teaching practices with reference to didactic and pedagogic principles and research in education.
- 3.4. Integrating a logic of continuous apprenticeship and development essential for developing positively in the school environment, linked to societal reality.

Programme structure

Ces compétences sont développées via trois types d'activités :

- des stages dans l'enseignement secondaire supérieur (60h);
- des séminaires en petits groupes;
- des cours magistraux et des conférences.

Une partie de ces activités est commune à toutes les disciplines (elles portent le sigle AGRE), l'autre partie est propre à la discipline (ces activités portent un sigle disciplinaire). Les activités totalisent 300 heures (30 crédits).

La formation diplômante « Agrégation de l'enseignement secondaire supérieur » est organisée en référence au décret du 8 février 2001 relatif à la formation initiale des enseignants du secondaire supérieur en Communauté française de Belgique et au décret du 17 décembre 2003 organisant la neutralité inhérente à l'enseignement officiel subventionné et portant diverses mesures en matière d'enseignement.

Le programme détaillé correspond aux 30 crédits de la finalité didactique là où elle est organisée. Si aucune finalité didactique n'est organisée dans la discipline, un programme d'agrégation spécifique propose les trois types d'activités, dans le respect des décrets sus-mentionnés.

CHIM2A Programme

Detailed programme by subject

IMPORTANT NOTE: In accordance with article 138 para. 4 of the decree of 7 November 2013 concerning higher education and the academic organisation of studies, teaching practice placements will not be assessed in the September session. Students are required to make every effort to successfully complete the teaching practice in the June session, subject to having to retake the year.

- 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...)

o Content:

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

○ LCHM2320A	Didactics and epistemology of science and chemistry - D2		[FR] [q1] [15h+15h] [3 Credits] ⊕
○ LCHM2320B	Didactics and epistemology of science and chemistry - D3		[FR] [q2] [15h+15h] [3 Credits] ⊕
○ LCHM2350T	Long internship (90 hours) and accompanying seminar in chemistry and science - Transition FIE		[FR] [q1+q2] [] [7 Credits] ⊕

o Un cours parmi :

⊗ LEISS2101	General pedagogy		[FR] [q1] [37.5h] [3 Credits] ⊕
⊗ LEISS2102	General pedagogy		[FR] [q1] [37.5h] [3 Credits] ⊕

o Une activité à choisir parmi (4 credits)

⊗ LMAT2320C	Didactics and epistemology of mathematics		[FR] [q1] [22.5h+7.5h] [4 Credits] ⊕
⊗ LGEO2320C	Didactics and epistemology of geography - Part A (general questions) and listening session		[FR] [q1] [22.5h+7.5h] [4 Credits] ⊕
⊗ LBIO2320C	Didactics and epistemology of science and biology - D2 and listening internship		[FR] [q1] [22.5h+7.5h] [4 Credits] ⊕

⌘ LPHYS2320C	Didactics and epistemology of science and physics - D2 and listening internship		FR [q1] [22.5h+7.5h] [4 Credits] 🌐
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o Module comprendre et analyser l'institution scolaire et son contexte

o Un cours parmi :

⌘ LEISS2203	Social, cultural, and political approaches to education	Branka Cattonar Vincent Dupriez	FR [q2] [37.5h+15h] [4 Credits] 🌐
⌘ LEISS2204	Social, cultural, and political approaches to education	Branka Cattonar Vincent Dupriez	FR [q2] [37.5h+15h] [4 Credits] 🌐

o Un cours parmi :

⌘ LEISS2205	Ethics of education, neutrality, and citizenship	Hervé Pourtois	FR [q2] [22.5h] [2 Credits] 🌐
⌘ LEISS2206	Ethics of education, neutrality, and citizenship	John Pitseys	FR [q2] [22.5h] [2 Credits] 🌐

o Module animer un groupe et travailler en équipe

o Un cours parmi :

⌘ LEISS2201	Developmental and learning psychology	Véronique Leroy (compensates Baptiste Barbot) Nathalie Roland Morgane Senden	FR [q2] [37.5h+15h] [4 Credits] 🌐
⌘ LEISS2202	Developmental and learning psychology	Véronique Leroy Nathalie Roland Morgane Senden	FR [q2] [37.5h+15h] [4 Credits] 🌐

⌘ Unités d'enseignement complémentaires

L'étudiant peut compléter son programme par une ou plusieurs des activités suivantes:

⌘ LAGRE2310	Micro-teaching exercises		FR [q1 or q2] [15h] [2 Credits] ⚠️ 🌐
⌘ LAGRE2221	Learning and teaching with new technologies		FR [q1] [15h+15h] [2 Credits] ⚠️ 🌐
⌘ LMAT2330	Seminar on the teaching of mathematics	Enrico Vitale	FR [q1+q2] [15h+30h] [4 Credits] 🌐
⌘ LEISS2902	Introduction to educational research	Stéphane Colognesi	FR [q1] [15h] [2 Credits] 🌐

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.

CHIM2A - Information

Access Requirements

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed 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](#)

General access requirements

Secondary school teacher training (AESS) is open only to holders of a Master's (second-cycle) degree awarded within the French Community of Belgium or a degree obtained abroad and deemed [equivalent in accordance with this Decree](#), a European directive, an international convention or other legislation, subject to the same requirements.

Students in the final stages of a minimum 120-credit Master's degree at an institution in the French Community may simultaneously enrol for teacher training. However, students admitted on these terms cannot be officially accepted until they have obtained the necessary Master's degree.

Specific professional rules

Successful completion of the Teacher Training Certificate (upper secondary education) leads to the award of the title of secondary school education specialist.

The [Réforme des Titres et Fonctions](#) ("Titles and Functions Reform"), in force since 1 September 2016, is intended to harmonise the titles, functions and pay scales of basic and secondary education professionals in French Community of Belgium networks.

It also aims to guarantee the priority of preferred titles over minimum titles and to establish a regime for titles in short supply.

AESS holders can learn which functions they can carry out and the pay scales from which they can benefit by [clicking here](#).

The university cannot be held responsible for any problems that students may encounter at a later date with a view to a teaching appointment in the French Community of Belgium.

Teaching method

Le programme se partage entre plusieurs types d'activités : des cours magistraux, des séminaires en petits groupes interdisciplinaires ou intradisciplinaires et une variété de stages (observation de pratiques enseignantes dans des classes, immersion durant 2 ou 3 journées dans une institution scolaire, pratiques d'enseignement en duo ou solo dans différentes classes et diverses filières d'enseignement).

L'implication active de l'étudiant dans la construction de ses savoirs est particulièrement sollicitée dans la réalisation et l'analyse de ses stages, dans les séminaires organisés en petits groupes et d'une manière générale dans les travaux individuels et de groupe qui fondent l'évaluation de plusieurs enseignements.

La charge de travail liée à l'ensemble du programme (aux 40 heures de stage d'enseignement notamment) est importante, elle exige un investissement sur une année académique. Elle n'est pas compatible avec la réalisation d'un autre programme pour plus de 30 crédits.

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".

Contacts

Curriculum Management

Entity

Structure entity

Denomination

Faculty

Sector

Acronym

Postal address

SST/SC/CAFC

[\(CAFC\)](#)

Faculty of Science [\(SC\)](#)

Sciences and Technology [\(SST\)](#)

CAFC

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Jury

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- Secretary: [Gabriel Dias de Carvalho Junior](#)
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Useful Contact(s)

- Administrative manager for the student's annual program: [Catherine De Roy](#)

