SCIENCES, TECHNOLOGIES, SANTÉ, INGÉNIERIE

Chemistry for life sciences (CLS)

Master Chimie

Durée
1 an

Composante
UFR Chimie-Biologie

Langue(s) d'enseignement
Anglais

Présentation

In the 2nd year in Chemistry for life sciences, classes will focus on chemistry at the interface with biology and its applications, with, in particular, courses on bioorganic and bioinorganic chemistry. The teaching units in bioorganic chemistry focuses on the synthesis, engineering and modification of biomolecules (proteins, nucleic acids and sugars) in order to obtain therapeutic, diagnostic or targeting tools. As for the UE in Bioinorganic chemistry, its aim is to understand the role of metals in living systems in order to best imitate the way in which they work and anticipate how they interact with biomolecules. A course of biology specific to the 2nd year's master CLS program raises students' awareness about the different innovative biological targets which have significant therapeutic and diagnostic interest. This cross-disciplinary specialization will broaden the students scientific culture at the chemistry-biology interface and enable a better understanding of the biological mechanisms and pathways that can be targeted. In parallel, students must also take a course of either biology or chemistry, within those proposed among the other programs of the chemistry or biology degree, to personalize their own formation.

This program provides students with the skills and knowledge of research issues in the chemistry for life sciences field, in order to be able to successfully carry out research projects at this interface (by continuing in doctoral education).

Formation internationale : Formation tournée vers l'international

Dimension internationale

Students have the possibility to follow courses all taught in English in semester 9 (30 ECTS) as well as in the 1str year (60 ECTS). Finally, the internship at the end of the 2nd year is an opportunity for students to be immersed for six months in a research academic laboratory, in France or abroad, and to play an active role in a research project.

Admission

Conditions d'admission

- Second year master's degree : to be eligible to apply you should have completed, or be enrolled in a first year of a master program in Science, and totalize 60 ETCS

Continuous education : Students fall under the continuous education scheme if they:

- go back to studies after an interruption of two years or more
- did follow a continuous education programduring one of the two previous years
- are employees, independent entrepreneurs or registered as job seekers

In case you do not have the required diploma, you might initiate the accreditation of personal and professional experience (VAPP).

Candidature

You want to apply ? Please be aware that the procedure differs depending on the diploma you want to take, the diploma you have already obtained and, for foreign students, your place of residence. Let us be your guide – simply follow this link

- 2 application campaigns are organized for the master 2nd year CLS
- Campaign 1 : Open campaign on e-candidate from march 30 to April 17 , 2020 included
- Campaign 2 : Open campaign on e-candidate from April 27 to May 15, 2020 included

Droits de scolarité

- Tuition fees 2019-2020 : 243 €
- CVEC fees : 91 €

Et après

Poursuite d'études

After the 2nd year's master in Chemistry for life sciences :

- Continue with a PhD
- Additional training in management, sales or quality : The 2nd year's master in Chemistry for life sciences leads to the following careers : engineer, laboratory manager (upon completion of the master's degree)
- Higher education research professor
- Researcher in academic or industrial laboratories (following a doctoral degree)

Secteur(s) d'activité(s)

Métiers visés

- Ingénieur d'études, cadre de laboratoire (en sortie de master)
- Enseignant-chercheur du supérieur
- Chercheur dans les laboratoires académiques ou industriels (après un doctorat)

Infos pratiques

Contacts

Responsable pédagogique

Sabine Chierici
Sabine.Chierici@univ-grenoble-alpes.fr

Contact administratif

Service Formation Chimie-Biologie
ufrchimiebiologie-formation@univ-grenoble-alpes.fr

Lieu(x) ville

Grenoble

Campus

Grenoble - Domaine universitaire

Programme

Master 2e année

Semestre 9

	Nature	CM	TD	TP	Crédits
UE Bio-targeted chemistry 1 & 2	UE	20h			6 crédits
UE Bionorganic chemistry	UE	40h			6 crédits
UE New Topics in Biological Chemistry	UE	20h			6 crédits
UE Main classes of drugs	UE	30h			3 crédits
UE High troughput biology	UE	30h			6 crédits
UE Structural determination of biological macromolecules	UE	25h	15h		6 crédits
UE Heterocyclic chemistry	UE	30h			3 crédits
UE Molecular modelling	UE	30h			3 crédits
UE Green chemistry	UE	30h			3 crédits
UE Biomaterials	UE	20h	4h		3 crédits

Semestre 10

	Nature	CM	TD	TP	Crédits
UE Internship	UE				24 crédits
UE Outils et méthodes pour l'ingénieur	UE	18h	21h		3 crédits
UE English	UE		24h		3 crédits
UE Business Plan of Your start-up	UE	18h	21h		3 crédits