UNIVERSITÉ Grenoble Alpes

Master in Chemistry

Master 2 Chemistry for Life Sciences (CLS)

Presentation

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).

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 bioactive molecules as research tools for biology. 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 M2 CLS program raises students' awareness about the different innovative biological targets which have significant therapeutic and diagnostic interest. This cross-disciplinary specialisation 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.

Registration and scholarships

Second year master's degree: to be eligible to apply you should have completed, or be enrolled in a first year of a Master programme in Science, and totalize 60 ECTS.

Public continuing education : You are in charge of continuing education:
• if you resume your studies after 2 years of interruption of studies,
• or if you followed training under the continuous training regime one of the previous 2 years
• or if you are an employee, job seeker, self-employed.

If you do not have the diploma required to integrate the training, you can undertake a validation of personal and professional achievements (VAPP).

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 2 CLS

- Campaign 1 : Open campaign on e-candidate: From 01 to 19 April 2019 included
- Campaign 2 : Open campaign on e-candidate: From April 29 to May 17, 2019 included

Further studies

After the 2nd year in Chemistry for Life Sciences:

- Continue with a Ph D

- Additional training in management, sales or quality

Practicals informations :

> **School :** UFR Chimie-Biologie
> **Duration :** 1 year
> **Course type :** Initial and Continuing Education, Education in apprenticeship, Professionalisation contract
> **Location(s) :** Grenoble - University campus
> **Contacts :**

Programme director

Sabine Chierici
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Administrative contact

Chemistry-Biology Course Services
ufrchimiebiologie-formation@univ-grenoble-alpes.fr

Program

Master 2nd year

Semester 9

UE Bio-targeted chemistry	3 ECTS	20h
UE Bionorganic chemistry	6 ECTS	40h
UE Topics in biological chemistry	3 ECTS	20h
UE Main classes of drugs	3 ECTS	30h

2 option (s) to choose from 5

UE High troughput biology	6 ECTS	40h
UE Structural determination of biological macromolecules	6 ECTS	40h
UE Heterocyclic chemistry	3 ECTS	36h
UE Molecular modelling	3 ECTS	30h
UE Green chemistry	3 ECTS	36h

Semester 10

UE Tools for engineers	3 ECTS	39h
UE Internship	24 ECTS	
UE English	3 ECTS	24h