

🕒 Notre offre de formation évolue ! Les programmes pour l'année 2027-2028 sont en cours de mise à jour et peuvent évoluer jusqu'au 28 novembre 2026. Les programmes de l'année universitaire 2026-2027 restent consultables en cas de besoin.

SCIENCES, TECHNOLOGIES, SANTÉ, INGÉNIERIE

## Parcours Molecular and cellular biology 1re année

Master Biologie - Santé



Niveau d'étude  
visé  
Bac +4



ECTS  
60 crédits



Durée  
1 an

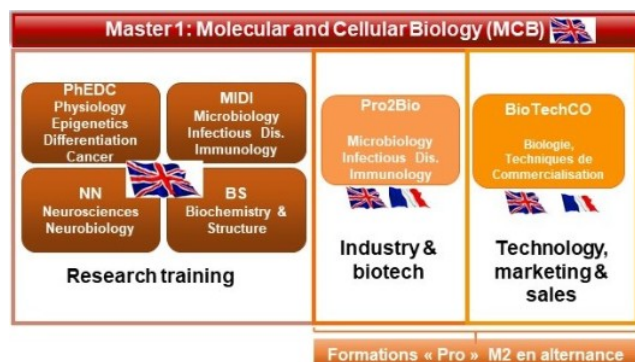


Composante  
UFR de Chimie  
et de biologie



Langue(s)  
d'enseignement  
Anglais

## Présentation



The Master of Molecular & Cellular Biology welcomes students with a bachelor of Science from France or any other place of the world who want to obtain a very high level of training in Cellular and Molecular Biology. All courses include lectures and tutorials linked to related research developed in Grenoble. In addition to a solid knowledge in many areas of biology, you will develop skills in project management, analysis of experimental data and oral & written presentation. You will also naturally progress in English, an indispensable language for any kind of professional career. The Master 1 program includes a 2-months internship which will give you a strong experience in the professional world.

The Master 1 MCB opens to the following M2 training program to start a scientific career in academic labs or R&D in private companies.

- Microbiology, infectious diseases and immunology program
- Structural biology of pathogens program
- Neurosciences, neurobiology program
- Physiology, epigenetics, differentiation and cancer program
- Pro2Bio program (taught partly in French and partly in English)

It opens also to sales-oriented M2 program

- Biologie et techniques de commercialisation program (taught in French)
- Science trading program (International program)

**For a general view of the Master of Biology, please watch the following video :**

🔗 <https://www.youtube.com/watch?v=5ISHb9rNBL8>

**Formation internationale :** Formation tournée vers l'international

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## Admission

### Conditions d'admission



First year of the master's degree in Biology (Molecular and Cellular Biology program) : if you have completed a bachelor's degree in Sciences or are enrolled in the final semester of a bachelor's program in Sciences in France, you are eligible to apply for the first year of the master's degree in Biology

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)

#### Information for International students concerning admission requirements :

M1 Molecular and Cellular Biology enrolment requires a BSc of Biology with a solid background in **cell biology, Biochemistry, genetics & molecular biology**

The following undergraduate specializations are **not eligible** for admission to this Master's program: **physiotherapy, veterinary sciences & zoology, nursing, medical sciences (medical laboratory analysis), technical engineering, nutrition sciences, education sciences, agricultural sciences, health sciences and social professions, dental surgery.**

Students in medicine or pharmacy must provide evidence of additional training in cellular and molecular biology.

## Candidature

**Master 1 Molecular and cellular biology : from 17th of february to 16 of march 2026** with [monmaster.gouv.fr](https://monmaster.gouv.fr)

You want to apply and sign up for a course master ? 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](#)

## Droits de scolarité

UGA registration fees : 254 € + 105 € CVEC

## Infos pratiques

### Contacts

Gestionnaire de scolarité

Scolarité Master Biologie

✉ [ufrchimiebiologie-master-biologie@univ-grenoble-alpes.fr](mailto:ufrchimiebiologie-master-biologie@univ-grenoble-alpes.fr)

### Lieu(x) ville

📍 Grenoble

## Campus

🏠 Grenoble - Domaine universitaire

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# Programme

## Organisation



The Master in Molecular & Cellular Biology starts with a common core in which students will acquire solid knowledge in gene expression regulation (Molecular Genetics and epigenetics of the cell; 6 ECTS) and biochemistry (Chemistry & Biochemistry; 6 ECTS). The first year of Master MCB is highly remarkable for its extensive hands-on-experience where students are given the chance to perform a lot of experiments (Driving Experimentation in Biology; 18 ECTS). Students build their own scientific project starting from the design of the project, followed by 3 weeks of experimentation in a dedicated lab at UGA.

An introduction to the world of business, its issues and its functioning will be offered to you (3 ECTS).

## Spécificités du programme

The Master Molecular & Cellular of Biology is entirely taught in English and welcomes students with a bachelor of science from France or any other place of the world.

### Master 1re année

#### Semestre 7

|                                                                        | Nature | CM    | TD    | TP   | Crédits    |
|------------------------------------------------------------------------|--------|-------|-------|------|------------|
| UE From cells to viruses : molecular genetics and epigenetics controls | UE     | 31,5h | 13,5h | 4h   | 6 crédits  |
| UE Driving Experimentation in Biology                                  | UE     | 3h    |       | 150h | 18 crédits |
| UE Cell Biochemistry                                                   | UE     | 31,5h | 21h   |      | 6 crédits  |

#### Semestre 8

|                                             | Nature | CM    | TD    | TP | Crédits   |
|---------------------------------------------|--------|-------|-------|----|-----------|
| UE Laboratory internship (part I)           | UE     |       |       |    | 6 crédits |
| UE Infectious Diseases (part I)             | UE     | 34,5h | 15h   |    | 6 crédits |
| UE Drug action and Drug Design              | UE     | 28h   | 18h   | 9h | 6 crédits |
| UE Immunobiology                            | UE     | 22,5h | 15h   |    | 6 crédits |
| UE Macromolecular Engineering               | UE     | 21h   | 16,5h | 9h | 6 crédits |
| UE Bacteriology                             | UE     | 27h   | 18h   |    | 6 crédits |
| UE Development and Differentiation          | UE     | 29h   | 18h   |    | 6 crédits |
| UE Metabolic Physiology and Pathophysiology | UE     | 27h   | 20h   |    | 6 crédits |

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|                                                          |    |       |       |    |           |
|----------------------------------------------------------|----|-------|-------|----|-----------|
| UE How to become a cancer cell                           | UE | 22,5h | 17,5h |    | 6 crédits |
| UE Molecular Bases of the Normal and Pathological Memory | UE | 36h   | 12h   |    | 6 crédits |
| UE Neurological Bases of the Emotions and Motivation     | UE | 32h   | 8h    | 6h | 6 crédits |
| UE Functional anatomy of the central nervous system      | UE | 33h   | 12h   |    | 6 crédits |
| UE Communication Tools                                   | UE | 2h    | 10h   | 4h | 3 crédits |
| UE Connaissance de l'entreprise et des métiers           | UE | 10h   | 14h   |    | 3 crédits |
| UE Ouverture Professionnelle                             | UE | 10h   |       |    | 3 crédits |
| UE English                                               | UE |       | 24h   |    | 3 crédits |
| UE ETC LANGUES                                           | UE |       |       |    | 3 crédits |