

# Parcours Molecular and cellular biology 1re année

Master Biologie



Niveau d'étude  
visé  
Bac +4



ECTS  
60 crédits



Durée  
1 an

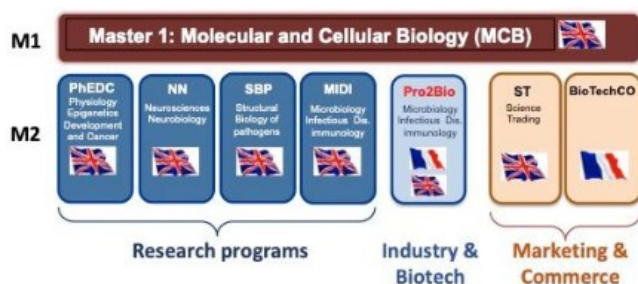


Composante  
UFR Chimie-  
Biologie



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

## 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)

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## Candidature

**Master 1 Molecular and cellular biology : from 26th of february to 24 of march 2024** 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

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## Droits de scolarité

UGA registration fees : 243 € + 100 € CVEC

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## Infos pratiques

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### Contacts

Gestionnaire de scolarité

Scolarité Master Biologie

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

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### Lieu(x) ville

📍 Grenoble

## Campus

🏠 Grenoble - Domaine universitaire

# 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; 6ECTS). 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	22,5h	15h	9h	6 crédits
UE Immunobiology	UE	39h	9h		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

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