SCIENCES, TECHNOLOGIES AND HEALTH

Master in Plant's biology

Biologie végétale

Target level
Baccalaureate +5

ECTS
120 credits

Duration
2 years

Component
UFR Chimie-Biologie

Language(s) of instruction
French

Subprograms

› Planta international

Presentation

The Master in Plant Biology is a double degree from the Université Grenoble Alpes (UGA) and the University of Milan (UniMi). In the 1st year, all students recruited by UGA or UniMi first spend one semester at UGA and then one semester at UniMi. The training aims to train experts in plant biology and biotechnologies, for basic or applied research and / or industry. For the courses delivered at the UGA, it relies on local research strengths, both for its teaching team which includes many researchers, as well as for its teaching methods and “workshops” in support research institutes. of the two universities and plant-specific units. With a modular and perfectly balanced teaching offer between UGA and UniMI, the course provides a unique opportunity for students to experience two academic, scientific and professional cultures.

The objectives of the PLANT-Int training are as follows:

- Deepening of all aspects of physiology, genetic development of plants and more generally of photosynthetic organisms
- Research training through research Increase in professionalization / skills: evolution and diversification of practices over the course of the training, in particular through the three internships that can be carried out in public or private research laboratories and in companies

International education : Internationally-oriented programmes

International dimension

A partnership agreement and an Erasmus + agreement have been signed for this course with the University of Milan, which for its part, created a Plant Science master's degree.

Organisation

Admission

Access conditions

- 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
- Second year of the master's degree in Biology : to be eligible to apply, you should have completed (or you should be enrolled in) a first year of a master’s degree in Sciences *i.e.* you should have validated 60 ETCS of a master’s

degree in Sciences by the end of your current academic year.

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).

Candidature / Application

Recruitment campaign : From 26th of february to 24 of march 2024 with 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

Fees

UGA registration fees : 243 € + 100 € CVEC

And after

Additional information

- Internationally open training: course entirely in English; outgoing and incoming student mobility of all students
- Implementation of innovative pedagogies, including learning through projects and collaborative work, pedagogical tutorials and reverse pedagogy

Useful info

Contacts

Program director

Christel Carles

Christel.Carles@univ-grenoble-alpes.fr

Administrative contact

Scolarité Master Planta International

ufrchimiebiologie-master-plantint@univ-grenoble-alpes.fr

Course location(s) - City

Grenoble

Campus

Grenoble - University campus

Program

Planta international

Master 1re année

Semestre 7 (à l'UGA)

	Nature	CM	TD	TP	Crédits
UE Introduction to Plant development and Signaling	Teaching Unit (UE)	25,5h	23h		6 credits
UE Evolutionary biology of plants	Teaching Unit (UE)	28,5h	16,5h		6 credits
UE Strategies in experimental biology	Teaching Unit (UE)		9h	72h	12 credits
UE Advanced scientific english/FLE/italian	Teaching Unit (UE)		24h		3 credits
UE Communication tools	Teaching Unit (UE)	3h	21h		3 credits
UE Business plan of your start-up (entrepreneurship and science)	Teaching Unit (UE)	14h	10h		3 credits
UE Knowledge of Company	Teaching Unit (UE)				3 credits

Semestre 8 (à l'UNIMI)

	Nature	CM	TD	TP	Crédits
UE Plant development part II	Teaching Unit (UE)				6 credits
UE Plant signal transduction part II	Teaching Unit (UE)				6 credits
UE Laboratory stage	Teaching Unit (UE)				6 credits
UE Plant Ecology	Teaching Unit (UE)				6 credits
UE Advanced plant cell biotechnology	Teaching Unit (UE)				6 credits

UE Plant metabolic engineering and nutrigenomics	Teaching Unit (UE)				6 credits
UE Development of crop ideotypes	Teaching Unit (UE)				6 credits
UE Molecular plant breeding and genetics	Teaching Unit (UE)				6 credits

Master 2e année

Semestre 9

	Nature	CM	TD	TP	Crédits
UE Evo Devo and the green lineage	Teaching Unit (UE)	22,5h	18h		6 credits
UE Epigenetics and cell differentiation	Teaching Unit (UE)	20h	20h		6 credits
UE Chemistry and cellular biochemistry	Teaching Unit (UE)	30h	20h		6 credits
UE Molecular Genetics and Epigenetics controls	Teaching Unit (UE)	31,5h	13,5h	4h	6 credits
UE Functional genomics (UNIMI)	Teaching Unit (UE)				6 credits
UE Molecular bioinformatics (UNIMI)	Teaching Unit (UE)				6 credits
UE Biostatistics, bioinformatics, modeling (part II)	Teaching Unit (UE)	27h	12h		6 credits
UE High throughput Biology	Teaching Unit (UE)	30h	10h		6 credits
UE Patenting and technology transfer (UNIMI)	Teaching Unit (UE)				6 credits
UE Environmental plant biochemistry and Physiology (UNIMI)	Teaching Unit (UE)				6 credits
UE Basic statistics and Experimental Design	Teaching Unit (UE)				6 credits
UE Molecular and Cellular Imaging (UNIMI)	Teaching Unit (UE)				6 credits
UE Laboratory Methods for Biodiversity (UNIMI)	Teaching Unit (UE)				6 credits

UE Intership I	Teaching Unit (UE)				12 credits

Semestre 10

	Nature	CM	TD	TP	Crédits
UE Internship II	Teaching Unit (UE)				24 credits
UE Evo Devo and the green lineage	Teaching Unit (UE)	22,5h	18h		6 credits
UE Epigenetics and cell differentiation	Teaching Unit (UE)	20h	20h		6 credits
UE Chemistry and cellular biochemistry	Teaching Unit (UE)	30h	20h		6 credits
UE Molecular Genetics and Epigenetics controls	Teaching Unit (UE)	31,5h	13,5h	4h	6 credits
UE Functional genomics (UNIMI)	Teaching Unit (UE)				6 credits
UE Molecular bioinformatics (UNIMI)	Teaching Unit (UE)				6 credits
UE Biostatistics, bioinformatics, modeling (part II)	Teaching Unit (UE)	27h	12h		6 credits
UE High throughput Biology	Teaching Unit (UE)	30h	10h		6 credits
UE Environmental plant biochemistry and Physiology (UNIMI)	Teaching Unit (UE)				6 credits
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UE Basic statistics and Experimental Design	Teaching Unit (UE)				6 credits
UE Molecular and Cellular Imaging (UNIMI)	Teaching Unit (UE)				6 credits
UE Laboratory Methods for Biodiversity (UNIMI)	Teaching Unit (UE)				6 credits
UE Molecular plant breeding and genetics	Teaching Unit (UE)				6 credits