

Master Biologie

Parcours PLANTA International (PLANT-Int)

Présentation

PLANT-Int is proposed by University Grenoble Alpes (UGA) and Università degli Studi di Milano ([UNIMI](#)) and leads to a **double master's degree diploma** delivered by both universities. Teaching is provided in english, by [commuting between Grenoble and Milan](#), with a large panel of options and [internships](#) that allow a **customized study plan** for every student.

Objectifs

The PLANT-Int major of the master's in biology focuses on **Plant science**. PLANT-Int trains future scientists for academic or private careers in **plant biology and plant biotechnology**.

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
- 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 \(VAPP\)](#).

Do you want to apply and sign up for a course ? 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.

- **2 times to register :**
- From 30th of march to 17of April, 2020
- From 27th of April to 15th of May, 2020

Let us be your guide – simply follow this [link](#)

Infos pratiques :

- > **Composante :** UFR Chimie-Biologie
- > **Durée :** 2 ans

- > **Type de formation** : Formation initiale / continue
- > **Lieu** : Grenoble - Domaine universitaire
- > **Contacts** :

Responsable(s) pédagogique(s)

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Secrétariat de scolarité

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

Programme

Master 1re année

Semestre 7

UE Plant development and signaling part I	6 ECTS
UE Evolutionary biology of plants	6 ECTS
UE Strategies in experimental biology	12 ECTS
UE Advanced scientific english/FLE/italian	3 ECTS
1 élément(s) au choix parmi 2	
UE Communication tools	3 ECTS
UE Entrepreneurship in sciences	3 ECTS

Semestre 8

UE Plant development, part II	6 ECTS
UE Plant signal transduction, part II	6 ECTS
UE Laboratory Stage	6 ECTS
2 élément(s) au choix parmi 6	
UE Plant ecology	6 ECTS
UE Advanced plant cell Biotechnology	6 ECTS
UE Plant metabolic engineering and Nutrigenomics	6 ECTS
UE Basic statistics and Experimental Design	6 ECTS
UE Development of crop ideotypes	6 ECTS
UE Molecular plant breeding and Genetics	6 ECTS

Master 2e année

Semestre 9

3 élément(s) au choix parmi 14		
UE Patenting and technology transfer (UNIMI)	6 ECTS	
UE Environmental plant biochemistry and Physiology (UNIMI)	6 ECTS	
UE Basic Statistics and Experimental design (UNIMI)	6 ECTS	
UE Molecular and Cellular Imaging (UNIMI)	6 ECTS	
UE Laboratory Methods for Biodiversity (UNIMI)	6 ECTS	
UE Epigenetics and cell differentiation	6 ECTS	36h
UE Molecular Genetics and Epigenetics of the Cell	6 ECTS	49,5h
UE Biostatistics, Bioinformatics, Modeling , Part II	6 ECTS	39h
UE High throughput in biology	6 ECTS	36h
UE Chemistry and Cellular Biochemistry	6 ECTS	
UE Photobiology and bioenergy (UNIMI)	6 ECTS	
UE Functional genomics (UNIMI)	6 ECTS	
UE Molecular bioinformatics (UNIMI)		
UE Evolution and development of Eukaryotes	6 ECTS	36h
UE Internship I	12 ECTS	

Semestre 10

UE Internship II	24 ECTS
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1 élément(s) au choix parmi 14

UE Patenting and technology transfer (UNIMI)	6 ECTS	
UE Environmental plant biochemistry and Physiology (UNIMI)	6 ECTS	
UE Basic Statistics and Experimental design (UNIMI)	6 ECTS	
UE Molecular and Cellular Imaging (UNIMI)	6 ECTS	
UE Laboratory Methods for Biodiversity (UNIMI)	6 ECTS	
UE Epigenetics and cell differentiation	6 ECTS	36h
UE Molecular Genetics and Epigenetics of the Cell	6 ECTS	49,5h
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UE High throughput in biology	6 ECTS	36h
UE Chemistry and Cellular Biochemistry	6 ECTS	
UE Photobiology and bioenergy (UNIMI)	6 ECTS	
UE Functional genomics (UNIMI)	6 ECTS	
UE Molecular bioinformatics (UNIMI)		
UE Evolution and development of Eukaryotes	6 ECTS	36h