

The Master program has a normal duration of 4 semesters and comprises 120 ECTS :

Module 1 : 15 ECTS : Compulsory Courses

Module 2 : 15 ECTS : Practical Project

Module 3 : 40 ECTS : Compulsory Course (2 ECTS) and Optional Courses (38 ECTS)

Module 4 : 50 ECTS : Personal Research Project

Training objectives are available in its programme regulations.

Compulsory Courses / Enseignements obligatoires		Hours per semester				Teaching Staff	ECTS	Limited nb of students
		C	E	S	PW			
MODULE 1	Semester 1 (Autumn) / Semestre 1 (automne)							
	Concepts in Ecology <i>Concepts en écologie</i>	6	-	-	-	Bertelsmeier C.	2	
	Concepts in Evolution <i>Concepts en évolution</i>	6	-	-	-	Schwander T.	2	
	Data Analysis (MSc MLS) <i>Analyses de données (MSc MLS)</i>	8	8	-	-	Bergmann S.	3	
	Introduction to Scientific Writing <i>Introduction à la rédaction scientifique</i>	5	11	-	-	Roulin A.	2	
	Molecular Methods in Ecology and Evolution <i>Méthodes moléculaires en écologie et évolution</i>	18	-	-	42	Sanders I., Fumagalli L. Salamin N.	6	
	Master BEC Retreat <i>Retraite Master BEC</i>	-	-	-	-	Kawecki T.	-	
	Animal Experimentation and Wild Animals * <i>Expérimentation animale et animaux sauvages</i>	20	-	-	20	Rubin J.-F.	-	
Introduction to R (optional support) <i>Introduction à R (mise à niveau optionnelle)</i>					Schütz F.	-		
Total	43	19	0	42		15		

Practical Project / Travail pratique								
MODULE 2	Semester 1 (Autumn) / Semestre 1 (automne)							
	First Step Research Project <i>Travail d'initiation à la recherche</i>	-	-	-	224	Kawecki T.	15	
Total							15	

* Only students assigned a master project involving animal experimentation may and must take this course

Abbreviations

C = Course
 E = Exercise
 S = Seminar
 PW = Practical Work

The pandemic has shown us that circumstances beyond our control may require us to make the following adjustments / adaptations to study plans during the semester:

- possibility to switch from one mode of teaching to another (face-to-face <-> distance, synchronous <-> asynchronous, switch to co-modal teaching where it was not initially planned).
- change / modification of evaluation modalities, without inducing derogations from the Study Regulations (oral <-> written, exam <-> validation, individual work <-> group work, practical work <-> theoretical work, face-to-face evaluation <-> online evaluation, etc.)
- alternative or time-shifted modalities for teachings, internships, practical work, fieldworks and camps that could not take place or teachings that could no longer take place in the form initially planned.

Students are invited to consult this document regularly (Study Plan & Evaluation Procedure)

		Hours in total				Teaching Staff	ECTS	Limited nb of students
		C	E	S	PW			
Compulsory Course / Enseignement obligatoire								
Semesters 2 to 4 (Spring / Autumn) / Semestres 2 à 4 (printemps / automne)								
Seminars of the Department of Ecology and Evolution <i>Séminaires du Département Ecologie et Evolution</i>		-	-	10	-	Kawecki T.	2	
Subtotal / Sous-total		0	0	10	0		2	
		Hours per semester				Teaching Staff	ECTS	Limited nb of students
		C	E	S	PW			
Optional Courses / Enseignements Optionnels *								
Semester 2 or 4 (Spring) / Semestre 2 ou 4 (printemps)								
MODULE 3	Applied Ecology <i>Ecologie appliquée</i>	14	-	-	36	Pellet J.	4	
	Behaviour, Economics and Evolution Lecture Series (HEC) <i>Séminaires BEE</i>	10	-	10	50	Lehmann L., Santos-Pinto L.	6	
	Co-evolution, Mutualism, Parasitism <i>Co-évolution, mutualisme, parasitisme</i>	14	-	-	-	Sanders I.	2	
	Current Problems in Conservation Biology <i>Problèmes actuels en biologie de la conservation</i>	14	14	-	-	Wedekind C.	4	10
	Ecology of the Fishes of Switzerland <i>Ecologie des poissons de Suisse</i>	7	-	-	10	Rubin J.-F.	2	
	Honeybee Ecology, Evolution and Conservation <i>Ecologie des abeilles, évolution et conservation</i>	14	-	-	-	Dietemann V.	2	
	Integrated course Mountain Ecosystems <i>Cours intégré écosystèmes de montagne</i>	28	-	-	-	Guisan A.	3	
	Interfaculty Seminar on the Environment (most in French, GSE) <i>Séminaire interfacultaire en environnement</i>	-	-	14	-	Guisan A.	2	
	Microbiome Analysis (MSc MLS) <i>Analyse du microbiome</i>	8	16	-	-	van der Meer J.	2	
	Phylogeny and Comparative Methods <i>Phylogénie et méthodes comparatives</i>	14	14	-	-	Salamin N.	4	
	Scientific Communication - Scientific Hands-on Workshop Module (in French only) <i>Médiation scientifique - module atelier scientifique</i>	14	14	-	-	Genovese J., Ciuffi A., Ducoulombier D., Trouilloud S., Ythier M.	4	8
	Spatial Modelling of Species and Biodiversity <i>Modélisation spatiale des espèces et de la biodiversité</i>	14	14	-	-	Guisan A.	4	
	The Evolution of Cooperation and Decision-Making <i>L'évolution de la coopération et de la prise de décision</i>	22	-	-	-	Lehmann L.	3	
	Introduction to High Performance Computing Cluster ** <i>Introduction au calcul de haute performance</i>	8	-	-	-	E. Jeanvoine	-	
	Semester 3 (Autumn) / Semestre 3 (automne)							
Advanced Data Analysis (MSc MLS) <i>Analyses de données : niveau avancé (MSc MLS)</i>	8	8	-	-	Ciriello G.	3		
Animal Communication and Parasitism <i>Communication animale et parasitisme</i>	14	-	-	-	Christe P., Roulin A.	2		
Anthropogenic Effects on Wild Animals: Mechanisms and Fitness Consequences <i>Effets anthropogènes sur les animaux sauvages : Mécanismes et conséquences sur la fitness</i>	14	-	-	-	Bize P.	2		
Biological Invasions <i>Invasions biologiques</i>	14	-	-	-	Bertelsmeier C.	2		
Phylogeography <i>Phylogéographie</i>	7	10	-	-	Fumagalli L.	2		
Plant and Animal Domestication: from History to Molecular Mechanisms (MSc MLS) <i>Domestication des animaux et des plantes : de l'histoire aux mécanismes moléculaires</i>	12	12	-	-	Soyk S.	3		
Population Genetics and Dynamics <i>Génétique et dynamique des populations</i>	9	20	-	-	Goudet J.	4		
Spatial Analysis and GIS in Ecology <i>Analyses spatiales et SIG en écologie</i>	7	10	-	-	Guisan A.	2		
Optional Field Courses / Etudes de terrain optionnelles (Financial contribution by the student required)								
Drivers of Invertebrate Biodiversity along Altitudinal Gradients <i>Facteurs déterminant la biodiversité des invertébrés le long de gradients altitudinaux</i>	6	-	-	42	Schwander T.	4	20	
Ecology and Evolution of the Mediterranean Flora <i>Ecologie et évolution de la flore méditerranéenne</i>	-	-	-	48	Pannell J.	4	14	
Integrated Practical Work Mountain Ecosystems in the Alps *** <i>Travaux pratiques intégrés écosystèmes de montagne dans les Alpes</i>	-	-	-	52	Guisan A.	4		
Total							40	

- * Students can choose optional courses not included in this study plan for a max. of 4 ECTS. They can also obtain a maximum of 6 ECTS for a professional internship outside of Unil. Both are subject to prior approval of the head of the Master and will require a sufficient proof of completion
- ** Students assigned a master project involving High Performance Computing Cluster must take this course
- *** Taking Integrated Course Mountain Ecosystems is a prerequisite to follow Integrated Practical Work Mountain Ecosystems in the Alps

		Hours per semester				Teaching Staff	ECTS
		C	E	S	PW		
Personal Research Project / Projet de recherche personnel							
Semesters 2 to 4 (Spring / Autumn) / Semestres 2 à 4 (printemps / automne)							
MODULE 4	Write a Review <i>Rédaction d'une revue</i>	4	2	-	-	Kawecki T., Director of the Master Research Project	5
	Master Research Project <i>Travail de Master</i>					Director of the Master Research Project	45
Total							50