

The Master program has a normal duration of 3 semesters and comprises 90 ECTS :

- 15 ECTS : Compulsory (10 ECTS) and Optional Courses (5 ECTS) (Module 1)
- 15 ECTS : First Step Project (Module 2)
- 30 ECTS : Compulsory (12 ECTS) and Optional Courses (18 ECTS) (Module 3)
- 30 ECTS : Personal Research Project (Master Thesis) (Module 4)

For specialisation Behaviour, Economics and Evolution (BEE) (30 ECTS), the student must obtain :

- 6 ECTS with Compulsory courses (marked in blue) in the Module 1
- 12 ECTS with Compulsory interdisciplinary subjects (marked in blue) in the Module 3
- 12 ECTS with at least 3 ECTS with Disciplinary optional subjects (marked in green) and at least 6 ECTS with Cross disciplinary optional subjects (marked in blue) in the Module 3

Training objectives are available in its programme regulations.

Specific training objectives: At the end of the course the students will be able to:

- Interact with biologists and economists alike and thus foster and stimulate interactions between these two fields of study.
- Respond to a biological question of behaviour and / or conservation and resource management by mobilising relevant economic science concepts.

Autumn Semester (semester 1)

	Courses / Enseignement	Hours per semester			Teaching Staff	ECTS Credits	Limited nb of students	
		C	E/S	PW				
	Compulsory / Obligatoires							
	Advanced Data Analysis in Biology I <i>Analyse de données en biologie I : niveau avancé</i>	6	-	6	Schütz F.	2		
	Introduction into Scientific Writing <i>Introduction à la rédaction scientifique</i>	7	9	-	Waterhouse R.	2		
	Microeconomics and Game Theory (HEC) <i>Microéconomie et jeux théoriques</i>	56	-	-	Thöni C.	6		
	Subtotal	69	9	6		10		
	Optional / Optionnel *							
MODULE 1	Advanced Data Analysis in Biology II <i>Analyse de données en biologie II : niveau avancé</i>	6	-	6	Schütz F.	2.5		
	Molecular Genetics <i>Génétique moléculaire</i>	18	-	-	Sanders I., Fumagalli L. N. Salamin	1.5		
	Problem-based Learning in Biological Models <i>Apprentissage par problème : modèles biologiques</i>	7	35	-	Franken P.	3.5		
	Scientific Research in all its Forms (for Biology) (Sciences2 - in French only) <i>La recherche dans tous ses états (pour biologie)</i>	14	-	-	Preissmann D.	1.5		
	Spatial Analysis and GIS in Ecology <i>Analyses spatiales et SIG en écologie</i>	7	10	-	Guisan A.	1.5		
	Introduction to R (optional support) <i>Introduction à R (mise à niveau optionnelle)</i>				Schütz F.	-		
	Animal Experimentation and Wild Animals ** <i>Expérimentation animale et animaux sauvages</i>	20	-	20	Rubin J.-F.	1.5		
	Animal Communication and Parasitism <i>Communication animale et parasitisme</i>	14	-	-	Christe P., Roulin A.	1.5		
	Phylogeography <i>Phylogéographie</i>	7	10	-	Fumagalli L.	1.5		
	Populations Genetic and Dynamic <i>Génétique et dynamique des populations</i>	7	10	-	Goudet J.	1.5		
	The Major Transitions in Evolution <i>Les grandes étapes de l'évolution</i>	14	-	-	Keller L.	1.5	12	
	Total						15	
		Practical Project / Travail pratique						
MODULE 2	First Step Project <i>Travail d'initiation à la recherche</i>	-	-	224	Goudet J., Lehmann L.	15		

* Obtain 5 ECTS with optional courses including at least 3 ECTS from courses recognised in the field according to the module 1 (marked in green).

** Only students who choose a master project with animal experimentation are allowed to select this course

Abbreviations

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

Spring Semester (semester 2)

Courses / Enseignement	Hours per semester			Teaching Staff	ECTS Credits	Limited nb of students
	C	E/S	PW			
	Compulsory interdisciplinary subjects ** <i>Sujets interdisciplinaires obligatoires</i>					
Behaviour, Economics and Evolution Lecture Series <i>Séminaires BEE</i>	10	10	50	Lehmann L., Santos-Pinto L.	6	
Environmental Economics <i>Economie environnementale</i>	28	-	-	Di Falco S.	3	
Social Evolution : from Genes to Culture <i>Evolution sociale : des gènes à la culture</i>	28	-	-	Lehmann L.	3	
Subtotal	56	10	50		12	
Disciplinary optional subjects ** <i>Sujets disciplinaires optionnels</i>						
Advanced Quantitative Genetics <i>Génétique quantitative avancée</i>	10	7	-	Robinson M.	1.5	
A Genomic Perspective on Early Human Migrations; an Introduction to Coalescent Theory and its Applications (MSc MLS) <i>Caractériser les premières migrations humaines à l'ère génomique : une introduction à la théorie de la coalescence et à ses applications (MSc MLS)</i>	11	3	-	Malaspinas A.-S.	1.5	
Applied Ecology <i>Ecologie appliquée</i>	14	-	28	Pellet J.	3	
Biological Invasions <i>Invasions biologiques</i>	14	-	-	Alexander J., Guisan A.	1.5	
Co-evolution, Mutualism, Parasitism <i>Co-évolution, mutualisme, parasitisme</i>	14	-	-	Sanders I.	1.5	
Current Problems in Conservation Biology <i>Problèmes actuels en biologie de la conservation</i>	14	14	-	Wedekind C.	3	
Ecology of the Fishes of Switzerland <i>Ecologie des poissons de Suisse</i>	7	-	10	Rubin J.-F.	1.5	
Evolution of Sex Determination <i>Evolution du déterminisme du sexe</i>	14	-	-	Perrin N.	1.5	8
Evolutionary Consequences of Hybridization and whole Genome Duplication <i>Conséquences évolutives de l'hybridation et de la duplication de génome</i>	14	-	-	Arrigo N.	1.5	
Honeybee Ecology, Evolution and Conservation <i>Ecologie des abeilles, évolution et conservation</i>	14	-	-	Dietemann V.	1.5	
Introduction to Primate Behaviour, Cognition and Culture <i>Introduction au comportement, à la cognition et à la culture des primates</i>	10	6	-	Van de Waal E.	1.5	
Phylogeny and Comparative Methods <i>Phylogénie et méthodes comparatives</i>	7	14	-	Salamin N.	1.5	
Plant Population Genetics and Conservation <i>Génétique des populations végétales et biologie de la conservation</i>	7	-	10	Felber F.	1.5	
Plant Range Dynamics and Global Change <i>Dynamique des distributions géographiques de plantes et changements globaux</i>	7	-	10	Randin C.	1.5	
Predictive Models of Species' Distribution <i>Modèles de distribution d'espèces et de la biodiversité</i>	14	14	-	Guisan A.	3	
Scientific Mediation and Communication - Scientific Hands-on Workshop Module (in French only) <i>Communication et médiation scientifique - module atelier scientifique</i>	8	-	20	Kaufmann A., Reymond P., Ducoulombier D., Trouilloud S.	3	6
Scientific Mediation and Communication - Museum Module <i>Communication et médiation scientifique - module musée</i>	28	-	-	Sartori M., Glaizot O.	3	6
Optional Field Courses (1) <i>Etudes de terrain optionnel</i>						
Biological Conservation of the Mediterranean Region <i>Biologie de la conservation dans les régions méditerranéennes</i>	-	-	40	Roulin A., Christe P., Fumagalli L.	2	
Ecology and Faunistics of the Sea Shore, Roscoff <i>Ecologie et faunistique du bord de mer, Roscoff</i>	7	-	49	Perrin N.	3	20
Evolution and Biogeography of Semi-arid and Island Floras <i>Evolution et biogéographie des flores insulaires en zone semi-aride</i>	-	-	40	Pannell J.	2	
Mountain Ecosystems: Patterns and Processes <i>Ecosystèmes montagnards : patterns et processus</i>	14	-	40	Guisan A.	3	

MODULE 3

** Obtain 12 ECTS with compulsory interdisciplinary subjects.

** Obtain 18 ECTS with optional courses including at least 3 ECTS from disciplinary subjects (marked in green) and at least 6 ECTS from cross disciplinary subject (marked in blue) according to the module 3.

(1) Financial participation by the student required

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	Courses / Enseignement	Hours per semester			Teaching Staff	ECTS Credits	Limited nb of students
		C	E/S	PW			
		Cross disciplinary optional subjects ** <i>Sujets optionnels cross disciplinaires</i>					
MODULE 3	Economic Growth <i>Théorie de croissance</i>	56	-	-	Sakalli S., Buggle J.	6	
	Leadership Development <i>Le développement du leadership</i>	28	-	-	Bendahan S.	3	
	Neuro Economie (in french) <i>Neuro économie</i>	56	-	-	Villa A.	6	
	Political and Institutional Economics <i>Economie politique et institutionnelle</i>	56	-	-	Girsberger E., Saia A.	6	
	Behavioral Economics (autumn) <i>Comportement économique</i>	56	-	-	Santos-Pinto L.-P.	6	
	Development Economics (autumn) <i>Economie de développement</i>	56	-	-	Esposito E.	6	
	Managerial Decision Making (autumn) <i>Prise de décision managériale</i>	56	-	-	Hoffrage U.	6	
	Organizational Theory and Decision Making (autumn) <i>Théorie et prise de décision organisationnelle</i>	56	-	-	Grieder M.	6	
	Total						30

MODULE 4	Course / Enseignement	ECTS Credits
	Master Thesis BEE <i>Travail de Master BEE</i>	Thesis Director <i>Directeur du travail de Master</i>

Obtain 12 ECTS with compulsory interdisciplinary subjects.

** Obtain 18 ECTS with optional courses including at least 3 ECTS from disciplinary subjects (marked in green) **and** at least 6 ECTS from cross disciplinary subject (marked in blue) according to the module 3.