

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 Optional disciplinary subjects (marked in green) and at least 6 ECTS with Optional Interdisciplinary subjects (marked in blue) in the Module 3
- Modules 2 and 4 have to be in behaviour, economics and evolution fields, validated by the head of BEE specialisation

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			
MODULE 1	Compulsory / Obligatoires						
	Data Analysis <i>Analyses de données</i>	6	-	6	Salamin N., Bergmann S., Ciriello G., Trejo Banos D.	2	
	Introduction into Scientific Writing <i>Introduction à la rédaction scientifique</i>	7	9	-	Waterhouse R.	2	
	Master BEC Retreat <i>Retraite Master BEC</i>	-	-	-	Kawecki T.	-	
	Microeconomics and Game Theory (HEC) <i>Microéconomie et jeux théoriques</i>	56	-	-	Thöni C., A. Gizatulina	6	
	Subtotal	69	9	6		10	
	Optional / Optionnel *						
	Advanced Data Analysis <i>Analyses de données : niveau avancé</i>	6	-	6	Salamin N., Bergmann S., Ciriello G., Trejo Banos D.	2,5	
	Molecular Methods in Ecology and Evolution <i>Méthodes moléculaires en écologie et évolution</i>	18	-	42	Sanders I., Fumagalli L., Salamin N.	5	
	Spatial Analysis and GIS in Ecology <i>Analyses spatiales et SIG en écologie</i>	7	10	-	Guisan A.	1,5	
	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.	-	
	Animal Communication and Parasitism <i>Communication animale et parasitisme</i>	14	-	-	Christe P., Roulin A.	1,5	
	Major Transitions in Evolution <i>Les grandes étapes de l'évolution</i>	14	-	-	Keller L.	1,5	12
Phylogeography <i>Phylogéographie</i>	7	10	-	Fumagalli L.	1,5		
Population Genetics and Dynamics <i>Génétique et dynamique des populations</i>	7	10	-	Goudet J.	1,5		
Total					15		
MODULE 2	Practical Project / Travail pratique						
	First Step Project <i>Travail d'initiation à la recherche</i>	-	-	224	Kawecki T., Lehmann L.	15	

* Obtain at least 3 ECTS from disciplinary courses (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	
The Evolution of Cooperation : from Genes to Learning and Culture <i>L'évolution de la coopération : des gènes à l'apprentissage et la culture</i>	28	-	-	Lehmann L.	3	
Subtotal	56	10	50		12	
Optional disciplinary subjects * <i>Sujets disciplinaires optionnels</i>						
Applied Ecology <i>Ecologie appliquée</i>	14	-	28	Pellet J.	3	
Biological Invasions <i>Invasions biologiques</i>	14	-	-	Bertelsmeier C.	1,5	
Co-evolution, Mutualism, Parasitism <i>Co-évolution, mutualisme, parasitisme</i>	14	-	-	Sanders I.	1,5	
Comparative Genomics : from Thousands of Genomes to Single Cells <i>Génomique comparative : des milliers de génomes aux cellules individuelles</i>	7	7	-	Arguello R.	1,5	
Current Problems in Conservation Biology <i>Problèmes actuels en biologie de la conservation</i>	14	14	-	Wedekind C.	3	10
Ecology of the Fishes of Switzerland <i>Ecologie des poissons de Suisse</i>	7	-	10	Rubin J.-F.	1,5	
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	
Integrated course Mountain Ecosystems - Ecology & Evolution <i>Cours intégré écosystèmes de montagne - écologie et évolution</i>	14	-	-	Guisan A.	1,5	
Integrated course Mountain Ecosystems - Geo-Environmental Sciences <i>Cours intégré écosystèmes de montagne - sciences géo-environnementales</i>	14	-	-	Guisan A.	1,5	
Introduction to Primate Behaviour, Cognition and Culture <i>Introduction au comportement, à la cognition et à la culture des primates</i>	10	8	-	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	
Spatial Modelling of Species and Biodiversity <i>Modélisation spatiale des espèces et de la biodiversité</i>	14	14	-	Guisan A.	3	
Scientific Communication - Scientific Hands-on Workshop Module (in French only) <i>Médiation scientifique - module atelier scientifique</i>	14	14	-	Kaufmann A., Reymond P., Ducoulombier D., Trouilloud S.	3	8
Scientific Mediation and Communication - Museum Module <i>Communication et médiation scientifique - module musée</i>	6	-	22	Sartori M., Glaizot O.	3	6
Social Genetics <i>Génétique sociale</i>	2	12	-	Keller L., Kay T.	1,5	
Optional Field Courses (Financial participation by the student required) <i>Etudes de terrain optionnelles</i>						
Ecology and Faunistics of the Sea Shore, Roscoff <i>Ecologie et faunistique du bord de mer, Roscoff</i>	7	-	49	Schwander T.	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	14
Integrated Practical Work Mountain Ecosystems in the Alps ** <i>Travaux pratiques intégrés écosystèmes de montagne dans les Alpes</i>	-	-	44	Guisan A.	2	

* Possibility of taking Optional interdisciplinary courses from the module 1 during semester 3 according to their availability

** To follow Integrated Practical Work Mountain Ecosystems in the Alps : do the two courses Integrated course Mountain Ecosystems

	Courses / Enseignement	Hours per semester			Teaching Staff	ECTS Credits	Limited nb of students
		C	E/S	PW			
		Optional Interdisciplinary subjects * Sujets interdisciplinaires optionnels *					
MODULE 3	Neuro Economie (in french) <i>Neuro économie</i>	56	-	-	Villa A.	6	
	Organizational Behavior (in french) <i>Comportement organisationnel</i>	28	-	-	Antonakis J., Dietz J.	3	
	Political and Institutional Economics <i>Economie politique et institutionnelle</i>	56	-	-	Saia A., Rohner D.	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	
	General Approach to Management (in french - autumn) <i>Approche générale du management</i>	28	-	-	Palazzo G., Castaner X., Conti A.	3	
	Heuristic Decision Making Strategies (autumn) <i>Stratégie heuristique de prise de décision</i>	56	-	-	Marewski J.	6	
	Human Behavior and Evolutionary Inference (autumn) <i>Comportements humains et évolution</i>	56	-	-	Efferson C.	6	
	Leadership Development (autumn) <i>Le développement du leadership</i>	28	-	-	Bendahan S.	3	
	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	-	-	Zehnder C.	6	
	Total						30

* Students can choose other HEC optional courses independently from this study plan in agreement with the head of BEE specialisation

Spring semester (semester 2) and Autumn Semester (semester 3)

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

Due to the sanitary evolution related to COVID-19, the study plans may be adapted during the semester as follows:

- 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).
- adaptation 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)