

Cours	Enseignants	★ S1	🌱 S2	★ S3	🌱 S4	Examen	Crédits	
Master of Science in Biology								TOTAL 120
Core Curriculum								TOTAL
Compulsory courses								TOTAL 21
Generic skills								TOTAL 9
Statistics	R. SLOBODEANU	30pg		30pg		controle continu	3	
Scientific writing	K. ZUBERBUEHLER	30pg		30pg		controle continu	3	
Seminars by externals	R. Knetsch T. TURLINGS	14pg	14pg	14pg	14pg	controle continu	3	
Computer tools								TOTAL 3
Bioinformatics tools	D. CROLL N. IVANOV	30pg		30pg		controle continu	3	
Models and parameter estimation	J. KOELLA	30pg		30pg		controle continu	3	
Seminars								TOTAL 6
Seminar ecology and biochemistry	F. KESSLER B. MAUCH-MANI T. TURLINGS	30pg		30pg		controle continu	3	
Seminar ecology and evolution	B. BENREY R. BSHARY J. KOELLA K. ZUBERBUEHLER	30pg		30pg		controle continu	3	
Seminar ecology and biodiversity	D. CROLL P. JUNIER E. MITCHELL M. Mulet S. RASMANN	30pg		30pg		controle continu	3	
Laboratory methods								TOTAL 3
Molecular methods	F. KESSLER P. LONGONI	7dj		7dj		controle continu	3	
Natural substance analysis	G. ROEDER S. VON REUSS	7dj		7dj		controle continu	3	
Elective courses								TOTAL 15
Special skills								TOTAL
Methods in biodiversity and conservation	C. PRAZ	28pg		28pg		écrit	3	
Soil and water management	P. BRUNNER D. HUNKELER	30pg		30pg		controle continu	3	
Plant systematics and evolution	J. GRANT	30pg		30pg		controle continu	3	
Spatial modelling of natural systems - 1	M. Bouzelboudjen	28pg		28pg		controle continu	3	
Spatial modelling of natural systems - 2	M. Bouzelboudjen Y. Gonseth		28pg		28pg	controle continu	3	
Microscopy	M. DADRAS	7dj		7dj		controle continu	3	
Excursion								TOTAL 6
EXC Tropical ecology	B. BENREY	7j		7j		controle continu	6	
EXC Marine biology	R. BSHARY		7j		7j	controle continu	6	
EXC Mediterranean ecology	W. Mueller		7j		7j	controle continu	6	
EXC Alpine ecology	S. BINDSCHEDLER J. GRANT S. RASMANN		7j		7j	controle continu	6	
Internship								TOTAL
Internship	K. ZUBERBUEHLER	1	1	1	1	controle continu	6	
Free electives								TOTAL
Meet your future employer (industry, public sector, NGOs)	T. TURLINGS	1dj		1dj		controle continu	1	
Specializations								TOTAL 24
Group I								TOTAL
Sustainable agriculture								TOTAL 12
Integrated pest management (course + workshop)	T. TURLINGS		30pg+4j		30pg+4j	controle continu	4	
Plant domestication and insect interactions	B. BENREY		30pg		30pg	controle continu	2	
Microbial ecology	S. BINDSCHEDLER P. JUNIER		30pg		30pg	controle continu	3	
Plant pathology	B. MAUCH-MANI		30pg		30pg	controle continu	3	
Animal behaviour								TOTAL 12
An integrative approach to animal behaviour	R. BSHARY E. GENTY		40pg		40pg	controle continu	4	
Behavioural ecology	R. BSHARY		40pg		40pg	controle continu	4	
Comparative cognition	E. GENTY		40pg		40pg	controle continu	4	
Group II								TOTAL 12
Chemical ecology								TOTAL 12
The basics of chemical ecology + labs	G. ROEDER T. TURLINGS		7dj		7dj			
Biosynthesis and function of secondary compounds	J. VERMEER		7dj		7dj	écrit	4	
Recent advances in chemical ecology	T. TURLINGS		7dj		7dj	controle continu	2	
Plant molecular genetics + labs	P. LONGONI J. VERMEER		7dj		7dj	controle continu	3	
Natural products chemistry + labs	S. VON REUSS		7dj		7dj	controle continu	3	
Conservation and biodiversity								TOTAL 12
Global change and restoration ecology	E. MITCHELL		30pg		30pg	controle continu	3	
Conservation biology	C. PRAZ		30pg		30pg	controle continu	3	
Animal conservation	Y. Gonseth C. PRAZ		30pg		30pg	controle continu	3	
From genes to ecosystems	S. RASMANN		30pg		30pg	controle continu	3	
Group III								TOTAL
Biology - Anthropology								TOTAL 12

Environmental problems interdisciplinary perspective: directed readings	A. AEBI E. HERTZ WERRO	28pg	28pg	controle continu	4
Environment and agri-food systems	J. FORNEY	2ph	2ph	Note d'enseignement	4
Advanced problems in social studies of science	E. HERTZ WERRO	28pg	28pg	controle continu	4
Anthropologie thématique - séminaire de socio-anthropologie de l'aide internationale	M. FRESIA	28pg	28pg	Note d'enseignement	4
Anthropologie thématique - Une anthropologie politique de la nature : ONG, réseaux et mouvements sociaux environnementaux	C. Dubuis	28pg	28pg	Note d'enseignement	4
Ecology and evolution					TOTAL 12
Ecological interactions	B. BENREY	30pg	30pg	controle continu	3
Evolutionary parasitology	A. Rojas	30pg	30pg	controle continu	3
Evolutionary ecology	D. CROLL	30pg	30pg	controle continu	3
Evolutionary applications	J. KOELLA	30pg	30pg	controle continu	3
Plant population genetics and conservation	F. FELBER	30pg	30pg	controle continu	3
Master Thesis					TOTAL 60
Master Thesis	B. BENREY R. BSHARY P. JUNIER F. KESSLER J. KOELLA E. MITCHELL T. TURLINGS K. ZUBERBUEHLER		1pg 1pg	mémoire / dissertation	60
Complément de formation (étudiants avec contrat pédagogique)					TOTAL