"International Master in Applied Ecology"
Study Programme

The table lists the modules offered during successive study periods (with indication on time schedule, hosting institution) and indicates the language of instruction, if the unit is compulsory (C) or elective (E), specific for IMAE students (P) or shared with regular students (M), the total workload in hours (WL) and the ECTS allocated. The categories (Cat.) of modules are: "Concept in applied & fundamental Ecology" (CE); "Transdisciplinary approach" (TA); "Immersion in socio-economic/scientific/cultural sectors with professionals" (IP); and "Tools for applied ecologists (methods and transferable skills)" (TE).
The units are detailed (objectives, outcomes, assessments, teaching hours) in a separate Annexe.

Code	Units of First Year	Cat.	C/E	M/P	WL	ECTS
Period P0	**Integrative period in Poitiers & IMAE Symposium** (September)		**C**			
UP-001	Intensive Course in French Language	TE	C	P	30	0
Period P1	**Université de Poitiers, France** (September to March)		**C**		**750**	**30**
Programme taught at Poitiers (September to January)						
UP-101	Ethology and Behavioural Ecology (en)	CE	C	M	75	3
UP-102	Molecular Ecology (en)	CE	C	P	75	3
UP-103	Management of Ecosystem Biodiversity – Field Studies (en)	IP	C	M	50	2
UP-104	Methods in Evolutionary and Applied Ecology (en)	TE	C	P	50	2
UP-105	Multilingual Creation of international resources in ecology with language training (fr, pt, de)	TE	C	P	50	2
UP-106	Research in Ecology - Seminars & Workshop (en)	CE	C	P	75	3
UP-107	Advanced Projects of Pluridisciplinary Approaches in Applied Ecology (en)	TA	C	P	75	3
UP-108	Modelling & Statistics Tools in Ecology	TE	C	P	75	3
One module must be selected for 3 ECTS (both units can be followed):						
UP-109	Principles of Ecosystem Analysis I (taught by CAU) (en)	TE	E	P	90	3
UP-110	Ecological Risk Assessment of Contaminated Sites (taught by UC) (en)	CE	E	P	75	3
Programme taught at Universidad San Francisco de Quito, Ecuador during the Field course (March)						
UP-114	Ecosystem Services and Conservation in Andean Watersheds (en)	IP	C	P	50	2
UP-115	Indigenous Groups, Oil Industry and Ecosystem Conservation in Biodiversity Hotspots (en)	IP	C	P	50	2
UP-116	Natural Resource Use and Tourism in Fragile Ecosystems of the Galapagos Islands (en)	IP	C	P	50	2
Period P2a	**Universidade de Coimbra, Portugal** (April to July)		**E**		**750**	**30**
30 ECTS have to be selected from the list below:						
UC-201	Environmental Quality Assessment (en)	CE	E	M	150	6
UC-202	Ecotoxicology & Ecological Risk Assessment (en)	CE	E	M	150	6
UC-203	Bioremediation – Field Studies (en)	CE	E	M	150	6
UC-204	Bio-monitoring & Biodiversity Management – Field Studies (en)	IP	E	M	150	6
UC-205	Biogeochemical Cycles & Environmental Assessment of Wetlands – Field Studies (en)	IP	E	M	150	6
UC-206	Stream Ecology and Monitoring – Field Studies (en)	CE	E	M	150	6
Period P2b	**Christian-Albrechts Universität zu Kiel, Germany** (April to July)		**E**		**900**	**30**
12 ECTS have to be composed from the list below:						
CAU-201	Long-Term Development of Landscapes – Field Studies (en)	TA	E	M	180	6
CAU-202	Integrated Management of Rural & Woodland Regions – Field Studies (en)	IP	E	M	180	6
CAU-203	Terrestrial Ecosystems – Field Studies (en)	CE	E	M	180	6
CAU-204	Freshwater & Wetland Systems – Field Studies (en)	CE	E	M	180	6
CAU-205	Hydrobiology in Poland – Field Studies (en)	IP	E	M	180	6
CAU-206	Coastal & Marine Ecosystems – Field Studies (en)	CE	E	M	180	6
18 ECTS have to be composed from the list below:						
CAU-207	Economic Aspects of Environmental Management (en)	TA	E	M	180	6
CAU-208	Principles of Ecosystem Analysis II (en)	CE	E	M	180	6
CAU-209	Ecological Indicators (en)	CE	E	M	180	6
CAU-210	Ecology of Soils – Practical Exercises (en)	CE	E	M	180	6
CAU-211	Applied Aquatic Ecology (en)	CE	E	M	150	5
CAU-212	Methods in Ecology – Field Studies (en)	TE	E	M	300	10
CAU-213	Modelling of Aquatic Ecosystems – Practical Exercises (en)	TE	E	M	180	6
CAU-214	Digital Spatial Analysis – Practical Exercises (en)	TE	E	M	180	6
CAU-215	Current Research Topics in Marine Ecology I (en)	CE	E	M	120	4

(to be continued)

Code	Units of Second Year		C/E	M/P	WL	ECTS
Period P3a	**Universidade de Coimbra, Portugal** (September to February)		**E**		**750**	**30**
UC-301	Advanced Data Analysis in Ecology (en)	CE	C	M	150	6
24 ECTS have to be composed from the list below:						
UC-302	Advanced Concepts in Ecology (en)	CE	E	M	150	6
UC-303	Disturb Streams: Hydrology, Ecology and management (en)	CE	E	M	75	6
UC-304	Remote Sensing & Geographic Information Systems (GIS) in Environmental Sciences (en)	TE	E	M	150	6
UC-305	Introduction to Scientific Writing (en)	TE	E	M	75	3
UC-306	Seminars in Ecology (en)	CE	E	M	100	4
Period P3b	**Université de Poitiers, France** (September to February)		**E**		**750**	**30**
Stream 1: "Ecosystems Management"						
UP-301	Natural Resources & Natural Areas – Field Studies (fr)	IP	C	M	150	6
UP-302	Ecosystem Management, Protection and Valorisation – Field Studies (fr)	IP	C	M	150	6
UP-303	Environmental Law Enforcement & Environmental Economics (fr)	TA	C	M	150	6
Stream 2: "Evolutionary Ecology"						
UP-304	Symbiotic Systems (en and fr)	CE	C	M	150	6
UP-305	Evolutionary Ecology (en and fr)	CE	C	M	150	6
UP-306	Evolutionary Genetics (en and fr)	CE	C	M	150	6
Compulsory modules for both streams:						
UP-307	Communication & Professional Skills (en and fr)	TE	C	M	150	6
UP-308	Statistics & Geographic Information Systems (GIS) tools – Field Studies (en and fr)	TE	C	M	150	6
Period P3c	**University of East Anglia, Norwich, UK** (September to February)		**E**		**600**	**30**
30 ECTS have to be composed from the list:						
UEA-301	Climate Change: Physical Science Basis (en)	TA	E	M	60	3
UEA-302	Understanding Global Environmental Change (en)	CE	E	M	60	3
UEA-303	Biodiversity Conservation and Human Society (en)	IP	E	M	120	6
UEA-304	Conservation genetics (en)	CE	E	M	120	6
UEA-305	Issues in Conservation (en)	CE	E	M	60	3
UEA-306	Practical Conservation and Work Experience – Field Studies (en)	IP	E	M	60	3
UEA-307	Restoration Ecology – Field Studies (en)	CE	E	M	60	3
UEA-308	Ecological Survey Methods (en)	TE	E	M	120	6
UEA-309	Marine Ecology and Biological Oceanography (en)	CE	E	M	60	3
UEA-310	GIS for Ecology and Environmental Management – Field Studies (en)	TE	E	M	60	3
UEA-311	Multivariate Statistics (en)	TE	E	M	60	3
UEA-312	Univariate Statistics (en)	TE	E	M	60	3
Period P3d	**Christian-Albrechts Universität zu Kiel, Germany** (September to February)		**E**		**900**	**30**
30 ECTS have to be composed from the list:						
CAU-301	Principles of Environmental Economics & Environmental Planning (en)	IP	E	M	180	6
CAU-302	Ecosystem Development and Ecosystem Protection – Field Studies (en)	IP	E	M	180	6
CAU-303	Advanced Ecosystem Analysis in Environmental Management (en)	CE	E	M	180	6
CAU-304	Long Term Analysis of Environmental Trends (en)	TA	E	M	180	6
CAU-305	Theory of Ecosystem Dynamics and Decomposing Systems (en)	CE	E	M	180	6
CAU-306	Nutrient Cycles & Sustainability (en)	CE	E	M	180	6
CAU-307	Identifying Chemical Key Processes in Ecosystems (en)	CE	E	M	180	6
CAU-308	Terrestrial Ecozones and Ecosystems (en)	CE	E	M	180	6
CAU-309	Experimental Plant Ecology (en)	CE	E	M	180	6
CAU-310	GIS and Population Dynamics in Landscapes – Field Studies (en)	TE	E	M	180	6
CAU-311	Current Research Topics in Marine Ecology II (en)	CE	E	M	180	6
Period P3e	**Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil** (September to		**E**		**750**	**30**
UFRGS-301	Biodiversity Conservation – Field Studies (en and pt)	CE	C	M	125	5
UFRGS-302	Theory and Analysis of Community Assembly and Organization (en)	CE	C	M	75	3
UFRGS-303	Measures and Assessment in Biodiversity – Field Studies (en)	CE	C	M	150	6
UFRGS-304	Statistics Applied to Ecology (en)	TE	C	M	150	6
10 ECTS have to be composed from the list below:						
UFRGS-305	Ecology, Conservation and Management of Subtropical and Tropical Grassland – Field (en)	CE	E	M	150	6
UFRGS-306	Landscape Ecology (pt)	CE	E	M	125	5
UFRGS-307	Restoration Ecology – Field Studies (en and pt)	CE	E	M	125	5
UFRGS-308	Biomarkers for Environmental Diagnostics and Monitoring (pt)	IP	E	M	100	4
UFRGS-309	Aquatic Ecology – Field Studies (pt)	CE	E	M	150	6
UFRGS-310	Ecological Entomology (pt)	CE	E	M	100	4
UFRGS-311	Biology of Crustaceans (en)	CE	E	M	125	5
UFRGS-312	Physiological Responses to Environmental Stress in Plants (en)	CE	E	M	125	5
UFRGS-313	Taxonomy of South Brazilian Forest Plant Species – Field Studies (pt)	CE	E	M	150	6
UFRGS-314	Geographic Information Systems (GIS) in Ecology (pt)	TE	E	M	100	4
UFRGS-315	Introduction to Linear Models in Ecology (pt)	TE	E	M	100	4
Period P4	**Each IMAE awarding institution (March to August, Year 2)**		**E**		**750**	**30**
Units 401	Project Management & Research Skills	TE	C	M	150	6
Units 402	Master Thesis (Research Project & Dissertation)	IP	C	P	600	24
Period P5	**Poitiers, IMAE Farewell Congress – Degree awarding ceremony (September, Year 2)**		**C**	**P**		

Note: ECTS conversion in workload follows the national standards detailed in "ECTS Handbook" edited by European Commission: France and Portugal: 25/30 hours per ECTS; Germany: 30 hours per ECTS; UK: 20 hours per ECTS. For partners in Brazil and Ecuador the table uses the conversion 1 ECTS is equivalent to 25 hours of workload.