

Pedagogical Program

ACADEMIC MASTER

Branch *Ecology and Environment*

Speciality *Protection of Ecosystems*

Establishment	Faculty	Department
<i>Khemis Miliana University</i>	<i>Faculty of Nature and Life Sciences and Earth Sciences</i>	<i>Ecology and Environment</i>

Field	Branch	Speciality
<i>Nature and Life Sciences</i>	<i>Ecology and Environment</i>	<i>Protection of Ecosystems</i>

Brief

The Ecosystem Protection Master's favors the development of integrated observation of natural "objects" centered on the transfer of water and matter and their physical, chemical and biogeochemical transformations within the Atmosphere-Biosphere-Hydrosphere-Pedosphere system. Emphasis is placed on a quantitative physical, chemical and biological approach to natural processes which correspond to the "original" training in Natural and Life Sciences (SNV) in the specialties related to water and the environment.

Semester organization sheet for lessons

Semester 01

Teaching unit	Matter	Credit	Coefficient	Weekly hourly volume			semester hourly volume
				C	TD	TP	
Fundamental Unit	Natural territorial systems	6	3	1h30	1h30	1h30	67h30
	Degradation of the environment and ecosystems	6	3	3h00	1h30		67h30
	Environmental climatology	6	3	1h30	1h30	1h30	67h30
Methodological unit	Statistical analyzes of data	5	3	1h30	1h00	1h30	60h00
	Sampling and experimentation	4	2	1h30		1h30	45h00
Discovery unit	Renewable and non-renewable energies	1	1	1h30			22h30
	Scientific English I	1	1	1h30			22h30
Transversale Unit	Communication	1	1	1h30			22h30
Total Semester		30	17	13h00	5h30	6h00	375h00

Semester 02

Teaching unit	Matter	Credit	Coefficient	Weekly hourly volume			semester hourly volume
				C	TD	TP	
Fundamental Unit	General ecotoxicology	6	3	3h00	1h30	1h30	67h30
	Waste management and treatment	4	2	3h00	1h30		45h00
	Ecological approach to land use planning	4	2	1h30	1h30		45h00
	Environmental rehabilitation techniques	4	2	1h30	1h30		45h00
Methodological unit	Spatial analysis and remote sensing	5	3	1h30	1h00	1h30	60h00
	Hydrobiogeochemical cycles	4	2	1h30	1h30		45h00
Discovery unit	Environmental impact study	2	2	1h30	1h30		45h00
Transversale Unit	environmental law	1	1	1h30			22h30
Total Semester		30	17	12h00	10h00	3h00	375h00

Semester 03

Teaching unit	Matter	Credit	Coefficient	Weekly hourly volume			semester hourly volume
				C	TD	TP	
Fundamental Unit	Management of protected areas	6	3	3h00	1h30		67h30
	Applied Ecotoxicology	6	3	1h30	1h30	1h30	67h30
	Management and development of unconventional resources	6	3	1h30	1h30	1h30	67h30
Methodological unit	Applied Geostatistics	5	3	1h30	1h00	1h30	60h00
	Instrumental analyzes and good laboratory practices	4	2	1h30		1h30	45h00
Discovery unit	Environmental Economics	1	1	1h30			22h30
	Scientific English II	1	1	1h30			22h30
Transversale Unit	Entrepreneurship	1	1	1h30			22h30
Total Semester		30	17	13h30	5h30	6h00	375h00

Semester 4

Training course in a company and/or in a university laboratory finalized by a dissertation and a defense..

	VHS	Coeff	Credit
Personal Work	450	09	18
Internship in a company	420	04	06
Workshops	75	02	03
Other (Research Laboratory)	35	02	03
Total Semester 4	750	17	30