

**Bachelor in Branch: Marine and continental hydrobiology****Speciality: Aquaculture and Fish Farming****Brief**

Training in aquaculture and fish farming at the University of Khemis Miliana aims to train future managers in the fisheries and aquaculture sector, with a view to responsible fishing and sustainable aquaculture. It covers applications in very specific fields, in particular, the design and construction of a fish farm, the control of production cycles of farmed fish, the knowledge of the stages of growth and reproduction as well as the control of fish feeding based on local resources.

Field	Branch	Speciality
Science of nature and life	Marine and continental hydrobiology	Aquaculture and Fish Farming

**First Semester**

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
<b>Fundamental Unit</b>	General and organic chemistry	6	3	1h30	1h30		67h30
	cellular biology	8	4	1h30	1h30		45h00
	Statistical Mathematics	4	2	1h30	1h30		45h00
Methodological unit	Geology	5	3	1h30		1h30	45h00
	Communication techniques and Expression 1 in French	4	2			1h30	22h30
Discovery unit	Working Method and Terminology 1	2	2	1h30			22h30
Transversale Unit	Universal History of Science Organic	1	1	1h30			22h30

## Second Semester 2

Teaching unit	Matter	Credit	Coefficient	Courses	TD	Practical Work	Volume (hour)
Fundamental Unit	Thermodynamics and chemistry of	4	2	1h30	1h30	1h30	45h00
	Plant's biology	4	2	1h30	1h30		45h00
	Animal Biology	2	1	1h30	1h30		22h30
Methodological unit	Physical	4	2	1h30	1h30		45h00
	Communication Techniques and Expression 2	4	2	1h30	1h30		45h00
Discovery unit	Life sciences and socio-economic impacts	2	1		1h30		22h30
Transversale Unit	EthWorking Method and Terminology 2	1	1	1h30			22h30

## Third Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental Unit	Zoology	4	2	1h30		1h30	45h00
	Limnology	2	1	1h30			22h30
	Biochemistry	6	3	3h00	1h30		67h30
	Genetics	6	3	3h00	1h30		67h30

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Methodological unit	Communication and Expression Techniques (in English)	4	2	1h30	1h30		45h00
	Biophysics	5	3	1h30	1h30	1h30	60h00
Discovery unit	Environment and Sustainable Development	2	2	1h30	1h30		45h00
Transversale Unit	University Ethics and Deontology	1	1	1h30			22h30

#### Fourth semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental Unit	Oceanology	4	2	1h30	1h30	-	45h00
	Microbiology	8	4	3h30	1h30	1h30	90h00
	Botany	6	3	3h30	-	1h30	67h30
Methodological unit	Vegetal Physiology	4	2	1h30	-	1h30	45h00
	Biostatistics	5	3	1h30	1h30	1h30	60h00
Discovery unit	General ecology	2	2	1h30	1h30	-	45h00
Transversale Unit	Computer science	1	1	1h30	-	-	22h30

#### Fifth semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental Unit	Ecology of marine and continental environments	6	3	3h00	-	1h30	67h30

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
	Hydrogeology	4	2	1h30	-	1h30	45h00
	Physiology of aquatic organisms	6	3	3h00	-	1h30	67h30
	Biodiversity	2	1	1h30	-	-	22h30
Methodological unit	Hydraulics	4	2	1h30	1h30	-	45h00
	Hydrology	5	3	1h30	1h30	1h00	60h00
Discovery unit	Water treatment	1	1	1h30	-	-	22h30
	Endocrinology of fish	1	1	1h30	-	-	22h30
Transversale Unit	Selection and Genetic Improvement	1	1	1h30	-	-	22h30

#### Six Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental Unit	General Aquaculture	6	3	3h00	-	1h30	67h30
	Fish farming	4	2	1h30	-	1h30	45h00
	Processing technologies for aquaculture products	2	1	1h30	-	-	22h30
	Aquaculture engineering	2	1	1h30	-	-	22h30
	Pathology of aquatic organisms	4	2	1h30	-	1h30	45h00
Methodological unit	fisheries science	5	3	1h30	1h30	1h00	60h00
	Agro-fertilisation and pond management	4	2	1h30	1h30	-	45h00

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Discovery unit	Nutrition and food biotechnology	1	1	1h30	-	-	22h30
	Toxicology	1	1	1h30	-	-	22h30
Transversale Unit	Applied hydrobiology	1	1	1h30	-	-	22h30