

MASTER TRAINING OFFER

Establishment	Faculty	Department
Djilali Bounaama University of Khemis Miliana	Natural and Life Sciences & Earth Sciences	Biological Sciences

Field	Branch	Speciality
Natural and Life Sciences	Biotechnology	Microbial Biotechnology

First semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental unit (UEF)	Microbial biodiversity	6	3	3h00	1h30		67h30
	Microbial physiology and metabolism	8	4	3h00	1h30	1h30	90h00
	Enzymatic engineering	4	2	1h30	1h30		45h00
Methodological unit (UEM)	Valorization of substances of biotechnological Interest	4	2	1h30	1h30		45h00
	Molecular biology techniques	5	3	3h00	1h00		60h00
Discovery unit (UED)	Scientific English	2	2	1h30	1h30		45h00
Transversale unit (UET)	Communication	1	1	1h30			22h30

Second semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	HV
Fundamental unit (UEF)	Genomics and proteomics	6	3	3h00	1h30		67h30
	Microbial interactions	6	3	3h00		1h30	67h30
	Soil microbiology	6	3	3h00	1h30		67h30
Methodological unit (UEM)	Bioinformatics	5	3	1h30		2h30	60h00
	Techniques for the destruction and elimination of microorganisms	4	2	1h30	1h30		45h00
Discovery unit (UED)	Initiation to scientific research	2	2	1h30	1h30		45h00
Transversale unit (UET)	Legislation	1	1	1h30			22h30

Third semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume
Fundamental unit (UEF)	Toxicity and pathogenicity of microorganisms	6	3	3h00	1h30		67h30
	Bioengineering and industrial microbiology	6	3	3h00		1h30	67h30
	Microbial biotechnology applied to the environment	6	3	3h00	1h30		67h30
Methodological unit (UEM)	Experimentation and data analysis	5	3	3h00	1h00		60h00
	Molecule characterization techniques	4	2	1h30		1h30	45h00
Discovery unit (UED)	Research and valorization of results	2	2	1h30	1h30		45h00
Transversale unit (UET)	Entrepreneurship	1	1	1h30			22h30

Fourth semester

	VHS	Coeff	Credits
Personal Work	300h	10	20
Internship in a company	75h	5	10
Total Semester 4	375h	15	30