



# UNIVERSITÀ DEGLI STUDI DI PALERMO

**Department: Earth and sea sciences**

**A.Y. 2017/2018**

## **DEGREE COURSE IN ENVIRONMENTAL SCIENCES - ENVIRONMENTAL ANALYSIS AND MANAGEMENT -**

### **Characteristics**



Class of Master's Degree  
(MSc) on Environmental and  
land sciences (LM-75)



2 YEARS



PALERMO



FREE ACCESS



2110

### **Educational objectives**

The 2nd cycle degree course in Environmental Sciences aims to train professionals of high qualification and specialization capable to intervene with multidisciplinary expertise in the prevention, diagnosis and solution of environmental problems, even assuming direct responsibility for projects and facilities.

The objectives of the educational activities for students are directed to:

- Provide a systemic in-depth cultural training with respect to the environment and a good grasp of the scientific method, also in view of a possible access to PhD courses;
- Create the ability to identify and organize the interactions of the various factors involved in the complex environmental processes, systems and problems;
- Build the ability to apply a variety of methodologies for the understanding and control of complex environmental situations as well as for the design of environmental restoration and remediation actions;
- Provide the knowledge to assess environmental resources and formulate hypotheses for land management and planning and for environmental conservation, also incorporating environmental variables with the regulatory systems and the economic logic.

As part of the systemic training necessary to achieve the overall objectives, which is carried out through the integrated knowledge of the biological, chemical, environmental, physical, mathematical disciplines, earth science, legal and economic evaluation.

The educational program provides theoretical, methodological, experimental and applied competences for the analysis of environmental systems and processes and for the promotion of the quality of the environment.

Considerable space is devoted to the preparation of the thesis, which involves an interdisciplinary and experimental work and can be carried out in collaboration with external public or private facilities.

### **Professional opportunities**

Central Public administration, such as Ministries (Environment, Health, Cultural heritage, Infrastructures, University and Scientific and Technological research).

Local public administration, such as regions, Provinces, Municipalities and ARPA; private companies.

Public and private agencies (after passing the national qualification examination and enrolment in the relevant registrar).

Graduate may also find professional opportunities in the field of scientific research in agencies and institutions such as Universities, National Research Council, ENEA, ENEL, through their participation to PhD courses in various scientific fields (biology, geology, chemistry).

### **Final examination features**

It consists of an original written dissertation coherent with the objectives of the degree course, prepared under the guidance of a Course professor, and of its presentation and discussion in front of the examining Board.

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
18671 - BIOINDICATORS - INTEGRATED COURSE	12	1	V		
- ANIMAL AND CELLULAR BIOINDICATORS Parisi(PA)	6	1		BIO/05	B
- DEFENCE SYSTEMS AND RESPONSE TO STRESS Cammarata(PO)	6	1		BIO/05	C

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

Subjects 1 ° year	CFU	Sem.	Val.	SSD	TAF
17207 - ENVIRONMENTAL CHEMISTRY <i>Orecchio(PA)</i>	6	1	V	CHIM/12	B
11718 - LANDSCAPE ECOLOGY <i>Iardi(PA)</i>	6	1	V	BIO/03	B
18183 - POLLUTION PHENOMENA AND ENVIRONMENTAL RECLAMATION TECHNOLOGIES <i>Di Trapani(PA)</i>	6	1	V	ICAR/03	B
19243 - ENVIRONMENTAL GEOLOGY WITH GIS ANALYSIS - INTEGRATED COURSE	9	2	V		
- ENVIRONMENTAL GEOLOGY <i>Conoscenti(PO)</i>	6	2		GEO/04	B
- GIS ANALYSIS <i>Conoscenti(PO)</i>	3	2		GEO/04	C
03510 - PRINCIPLES OF ENVIRONMENTAL IMPACT EVALUATION <i>Calvo(PQ)</i>	6	2	V	BIO/07	B
15406 - REMOTE SENSING AND TERRITORIAL INFORMATION SYSTEMS <i>Maltese(RD)</i>	6	2	V	AGR/10	B

**51**

Subjects 2 ° year	CFU	Sem.	Val.	SSD	TAF
16164 - APPLIED ECOLOGY <i>Vizzini(PO)</i>	6	1	V	BIO/07	B
18668 - GEOCHEMISTRY OF SURFACE PROCESSES - INTEGRATED COURSE	9	1	V		
- FLUID-ROCK REACTIONS <i>Censi(PA)</i>	3	1		GEO/08	C
- SOLUTION PHASE PROCESSES <i>Censi(PA)</i>	6	1		GEO/08	B
18698 - ENGLISH LANGUAGE - LEVEL B2	3	1	G		F
13121 - PRACTICE	6	1	G		F
19403 - CHEMISTRY OF NATURAL ORGANIC SUBSTANCES <i>Maggio(PA)</i>	6	2	V	CHIM/06	B
19404 - POLLUTANTS CHEMISTRY <i>Piazzese(PA)</i>	6	2	V	CHIM/01	B
05917 - FINAL EXAMINATION	21	2	G		E
Free subjects	12				D

**69**

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)