

ENVIRONMENTAL SCIENCE DEGREE

ACADEMIC YEAR 2007/2008

Degree Environmental Science

Centre Faculty of Sciences
Darwin, 2
Campus de Cantoblanco
28049 – Madrid
Phone: 914978349
[Web page](#)

Academic Credits 300

1st and 2nd cycle

Total Credits	Compulsory Credits	Optional Credits	Free Election Credits	Total
First Cycle	139	0	11	150
Second Cycle	71	60	19	150
Total	210	60	30	300

FIRST CYCLE

First Course	Compulsory Credits 66	Optional Credits 0	Free Election Credits (*)
---------------------	---------------------------------	------------------------------	-------------------------------------

Code	Subject	Type	Credits	Semester
12562	Geology I	(Tr)	6	1
12563	General Biology	(Tr)	6	1
12565	Environmental Psychology	(Ob)	6	1
14825	Chemistry	(Tr)	9	1
14828	Mathematics I	(Tr)	5	1
12574	Mathematics II	(Tr)	5	2
12569	Environment and Society	(Tr)	6	2
12581	Geology II	(Tr)	6	2
14826	Botany	(Tr)	6	2
14827	Zoology	(Tr)	6	2
14829	Laboratory of Chemistry	(Ob)	5	2

Second Course	Compulsory Credits 73	Optional Credits 0	Free Election Credits (*)
----------------------	---------------------------------	------------------------------	-------------------------------------

Code	Subject	Type	Credits	Semester
12575	Ecology I	(Tr)	6	1
12577	Environmental Microbiology	(Ob)	6	1
12578	Introduction to Economy	(Ob)	6	1
14830	Physics	(Tr)	9	1
14831	Plant Physiology	(Ob)	5	1
14832	Animal Physiology	(Ob)	5	1
12582	Ecology II	(Tr)	6	2
12583	Environmental Engineering Basis	(Tr)	6	2
15284	Environmental Administration and Legislation	(Tr)	6	2
15285	Geographical Information Systems	(Tr)	6	2
12586	Statistics Basis	(Ob)	6	2
15272	Soil Science	(Ob)	6	2

SECOND CYCLE

Third Course	Compulsory Credits 44	Optional Credits 24 (***)	Free Election Credits (**)
---------------------	---------------------------------	-------------------------------------	--------------------------------------

Code	Subject	Type	Credits	Semester
12587	Applied Economy	(Tr)	6	1
12588	Statistics	(Tr)	6	1
12589	Meteorology and Climatology	(Tr)	6	1
12590	Physical Planning and Environment	(Tr)	9	2
12592	Advanced Environmental Law	(Ob)	6	2
12594	Environmental Toxicology and Public Health	(Tr)	6	2
14833	Projects Organization and Management	(Tr)	5	2

Fourth Course	Compulsory Credits 27	Optional Credits 36 (***)	Free Election Credits (**)
----------------------	---------------------------------	-------------------------------------	--------------------------------------

Code	Subject	Type	Credits	Semester
12593	Environmental Impact Assessment	(Tr)	9	1
12595	Management and Conservation of Natural Resources I	(Tr)	6	1
12597	Atmospheric Pollution	(Tr)	6	1
12596	Management and Conservation of Natural Resources II	(Tr)	6	2

(Tr): Troncal = Compulsory Credits
 (Ob): Obligatorio = Compulsory Credits
 (Op): Optativo = Optional Credits

Optional Credits

ROUTE A: "ENVIRONMENTAL TECHNOLOGY"

Code	Subject	Credits	Course	Semester
12598	Instrumental Techniques for Environmental Analysis	6	3°	1
12599	Light and Environment	6	3°	1
12600	Biological Methods for Environmental Analysis and Bioindicators	6	4°	2
12602	Waste Management	6	4°	2
12603	Chemical Reaction Engineering	6	3°	1
12604	Energy and Environment	6	4°	1
12605	Biological Techniques for Decontamination	6	4°	2
12607	Water Processes and Treatment Technologies	6	4°	2
14837	Basic Operations in Environmental Engineering	6	4°	1
14835	Contamination of Environmental Systems: Soils	6	4°	1
14834	Contamination of Environmental Systems: Water	6	4°	1
12606	Environmental Biotechnology	6	3°	1
12637	Laboratory of Geology	6	3°	2

ROUTE B: “ENVIRONMENTAL MANAGEMENT AND SUSTAINABLE DEVELOPMENT”

Code	Subject	Credits	Course	Semester
12613	Growth, World Economy and Sustainable Development	6	4º	1
12614	Environmental Perception	6	3º	1
12618	Development and Rural Planning	6	4º	2
12620	Public Policies Management	6	4º	2
12622	Human Ecology	6	3º	1
12623	Natural Resources (No Renewable)	6	3º	2
12624	Environmental Interpretation and Education	6	3º	1
12627	Interdisciplinary Seminar on Environment and Development in Latin America	6	3º	1
12629	Advanced Methods for GIS and Remote Sensing	6	4º	2
12632	Planning and Management of Natural Protected Areas	6	4º	1
12633	Hydrology and Water Resources Management	6	4º	1

ROUTE C: “MANAGEMENT AND RESTORATION OF ECOSYSTEMS”

Code	Subject	Credits	Course	Semester
12601	Environmental Physiology	6	3º	1
14836	Conservation Genetics	6	4º	1
12631	Ecosystem Restoration	6	4º	2
12632	Planning and Management of Natural Protected Areas	6	4º	1
11875	Thematic Mapping	6	4º	1
12633	Hydrology and Water Resources Management	6	4º	1
12635	Geobotany (Phytosociology)	6	4º	1
12637	Laboratory of Geology	6	3º	2
12623	Natural Resources (No Renewable)	6	3º	2
12629	Advanced Methods for GIS and Remote Sensing	6	4º	2

COMMON TO THE THREE ROUTES:

Code	Subject	Credits	Course	Semester
14838	Policies, Management Systems, Audits and Environmental Risks Prevention	6	4º	2
12639	Simulation of Environmental Systems	6	3º	2
15273	Graduation Project	18	4º	2