

NAME OF THE DEGREE

Environmental Sciences Graduate Degree, by the University of Cadiz

OCCUPATIONAL OPENINGS

The attributes related to the Environmental Sciences Degree are the following: Environmental management in the public and private sectors: coordination of environmental studies; responsibility for programs of sustainability for an area or region; preparation of environmental reports and studies. Local Development Agent (LDA).

Consultancy and Advising on topics of environmental sustainability and environmental legislation. Developing and implementing Environmental Management Systems.

Assessment of environmental impact.

Environmental research, design and innovation: Eco-efficiency and Eco-innovation.

Regulation and management of a defined territorial area. Planning, analysis and management of natural spaces and protected areas.

Negotiation, participation and mediation in environmental conflicts.

Environmental training and education. Manager of environmental education programs; environmental educator.

Risk analysis. Supervision, risk prevention and control of environmental quality.

Planning and management of resources. Optimization of the use of resources and promotion of energy saving. Performance of energy audits. Viability studies and exploitation of renewable energy.

Scientific research.

Teaching.

JUSTIFICATION OF THE PROPOSED QUALIFICATION: ACADEMIC, SCIENTIFIC AND PROFESSIONAL INTEREST

The over-exploitation of natural resources, increasing occupation and destruction of natural lands, and the degradation of the natural environment and the resources necessary for our survival is forcing society to give priority to environmental factors in all public policies at all levels (local, regional, national and global). Many changes are necessary, on diverse scales, to do with our sources of energy, our modes of communication, our water supply systems, our efficiency in protecting the natural environment - in fact, in almost our entire way of life. There are many aspects of our very varied and complex lives where specialists are needed who understand the interactions between human activities and the natural environment. These specialists will have a multidisciplinary perspective, and will know how to take measures and decisions that minimize or counteract the negative consequences of our way of life. They will

offer realistic ideas for modifying or adapting our activities so that they are more environmentally correct and “sustainable”.

SPECIFIC COMPETENCES OF THE GRADUATE (SCGs)

SCG1. To understand and study the natural environment as a system; to identify the factors, behaviours and interactions that configure the studied system.

SCG 2. To know the techniques in field and laboratory work, and be able to apply them.

SCG 3. To have up-to-date knowledge of the main environmental laws and regulations and their application to the assessment and management of the natural environment.

SCG 4. To understand the interactions between the natural environment and society.

SCG 5. To understand the legal and administrative instruments for territorial planning and control, and the interpretation of specialised maps for different topics.

SCG 6. To integrate the various kinds of experimental evidence obtained in field and laboratory studies with theoretical knowledge.

SCG 7. To interpret and apply environmental laws and regulations, and to develop environmental policies.

SCG 8. To be capable of carrying out environmental management plans and audits.

SCG 9. To identify and quantify environmental costs, and their application for the development of clean technologies.

SCG 10. To devise programs for the prevention and assessment of environmental risks and impacts.

WHAT ARE WE LOOKING FOR IN YOU?

As a professional Environmental Scientist (in a field where there are millions of wellintentioned non-experts), you should be motivated to learn, to acquire well-founded knowledge, and have genuine interest in the environmental implications of human activities, their negative effects, and the ways of alleviating or minimizing these effects, in accordance with national and international laws and regulations. You must also know how to examine and diagnose the state of health of a natural system from all points of view, so as to be capable of identifying the variables and indicators of its deterioration, their origins and causes. You will know how to predict the effects associated with the degradation of air, soils and waters, whatever the causes.

You should know how to disseminate scientific knowledge and information with the objective of making society aware of the need to make effective changes in customs and attitudes, in order to counter the negative environmental effects of many of the daily activities done by our fellow-citizens. Such changes would ideally recruit more and more citizens as defenders of the natural environment, since a sustainable way of life in which the natural world is respected and protected will prove to be a better way of life for all.

FOR MORE INFORMATION, contact us at the:

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