

NEW SUGGESTIONS OF POSTGRADUATE PROGRAMS OF HIGH DEMAND IN FORESTRY AND ENVIRONMENTAL ENGINEERING

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This work presents new suggestions of postgraduate programs in degrees of forestry and environment themes, based on an exhaustive analysis of national and international degrees with the most success in the quoted areas. The work is included within the 2014 call of grants to educational innovation and for improvement of teaching quality of Polytechnic University of Madrid (UPM).

For this purpose specific indicators have been obtained, divided in two groups: academic indicators and employability indicators. To obtain the academic indicators, a data base of existing programs has been made. Next information has been compiled: country, university/institution, modality (face-to-face, on-line, mixed), number of academic credits, number of offered places, references, contact, number of students, work in enterprises offer, seniority of the degree, price, and possible redirection to doctoral programs. This information has been collected via web and also directly with the institutions via mailing. The work has been divided in four main areas: Spain, Europe, and Latin America and Anglo-Saxon countries (EE.UU., Canada and Australia).

This way, the most important universities have been selected by means of webometrics quality ranking, including nowadays more than 21.000 universities in the whole world; in Europe, universities with ERASMUS agreement with UPM have been prioritized. Thus, a ranking of degrees has been made in order to show the strength and advantages of the most demanded degrees.

In the other hand and with the aim of obtaining the employability indicators, an analysis of the employment prospects has been carried out in Spain and in the rest of the world. This work was divided in two main areas: Traditional sectors of forestry and environmental degrees (wood industry, cork, hunting and fishing, environmental impact, etc...), and the new market niches that have the most projection in the future: employment demand related with green energy and environment in a wide sense (pollutant modelling, waste management, forest certification, environmental quality, etc...).

For this purpose a wide literature has been consulted, in which national and international reports by productive sectors are included, as well as employment reports, statistical data bases and other reference documents.

First outcomes note that suggestions in traditional sectors should be outlined with a wide territorial approach as the demand of this kind of professionals will be out of Spain, and probably, out of Europe.

Besides, it seems to be of most interest to work in outline proposals in clean energies, waste management and environmental quality.