

# Work in Progress: Modeling the best practices of adaptation to European credit transfer system in technical teachings as improvement to the mobility of students

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**Abstract** - European countries face significant challenges in crossing international, cultural, and social borders building the common space for Higher Education. The key in this process, to promote the mobility of the students is the implantation of the European credit transfer system (ECTS). The Spanish universities have begun their process of adaptation of unequal way, with the obligation, in any case, to adapt to the system of credits established in its normative prior to 2010. It is at the present moment, with its forced implementation, when universities require knowing the best practices of adaptation. Some universities have begun with some experiences but all of them look for references of how to do it. This task is not trivial. The objectives for the WIP here presented are to establish a description model of experiences of adaptation on credits ECTS that allows the comparison of all of them and to compile and organize experiences. Later, it will be developed a web site to disseminate the best experiences.

**Index Terms** - Globalization: Preparing faculty and students, mobility, ects

## THE ROLE OF THE ECTS IN THE EUROPEAN HIGHER EDUCATION

European countries face significant challenges in crossing international, cultural, and social borders building the common space for Higher Education. The key in this process, to promote the mobility of the students is the implantation of the European credit transfer system (ECTS). This new concept of credit, that supposes recognition of the real work of the student, provides the instruments necessary to understand and to compare the different education systems easily, to facilitate the recognition of the professional qualifications and national and international mobility, to increase the collaboration

between universities and the convergence of the educative structures.

The current version of ECTS is mainly a student-centered credit transfer system which has been developed in the wake of EU programs for cooperation and mobility in higher education. ECTS was introduced in 1989 in the framework of 'Erasmus', now part of the 'Socrates' program, which is the only credit system which has been successfully tested and used across Europe. The ECTS is based on the student workload required to achieve the objectives of an educational program and it is specified in terms of learning outcomes and the competences to be acquired. [1]

If ECTS is not reduced to the issue workload of students, it may have enormous potential for reforming/improving higher education curricula, cultures of learning and structures. The introduction of ECTS in a coherent way must also consider the other essential components beside the workload of students. These may include the competencies and standards desired, the learning outcomes, the ways of documenting these, and flexible inter-institutional methods of recognizing accumulated credits earned in various education settings. Currently, the ECTS system is being used in most European countries, with the exception of parts of Belgium, Portugal and Luxembourg [2]. As regards the countries that are in the process of introducing the ECTS system, there are two kinds of situations. Firstly, there are those countries which are directly incorporating into this system, because their previous systems were not based on credits. Secondly, there are countries that are making adaptations from their own credit systems.

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**THE SPANISH CASE**

The current Law for Universities in Spain says that "... the Government will establish the rules in order to ensure that ECTS will be the unit of measure for all the courses from official curriculums... (art. 88.3)" [3]. Lately, a new law [4] has established that the total number of credits required for a degree must be distributed among all the courses in proportion to the number of hours needed by the student to attain that degree. The next question is to decide how much time is required to achieve each of the learning outcomes [5]. This calculation is based on the assumption that an average student can only do a certain amount of work in a certain amount of time. As this calculation and the available total amount of time will probably result in a mismatch that will be the moment to make compromises with regard to the level of the learning outcomes required. This process is not trivial and requires overcoming the resistance that is likely to be put up by the various stakeholders involved [6].

The Spanish universities have begun their process of adaptation of unequal way, with the obligation, in any case, to adapt to the system of credits established in its normative prior to 2010. It is at the present moment, with its forced implementation, when universities require knowing the best practices of adaptation. Some universities have begun with some experiences but all of them look for references of how to do it. This task is not trivial due to the different reasons that gave origin to the compiled experiences.

**EXPECTED OUTCOMES WITH THIS PROJECT**

Successfully addressing these issues this project implies to two working groups. In a first moment, the Conference of Deans and Directors of Computer Engineering of the Spanish Universities, and later extending the results in the context of a Thematic Network constituted by members of IEEE-ES (Spanish chapter) to the rest of Engineers disciplines.

The objectives are to establish a description model of experiences of adaptation on credits ECTS that allows the comparison of all of them and to compile and organize experiences.

Later, up to the end of the project, ending on November, it will be developed a web site:

- to disseminate the best experiences of adaptation on ECTS of the technical Spanish universities that can be reused by others.
- To answer the queries of students about the level of adaptation of a determined school, study or university.

That is to say, results in this project will provide a double dimension of interest. First, we will obtain a repository of the best practices of technical universities adapting ects with the possibility to be taken as reference by other universities but with the assurance of the quality of the experiences registered. Secondly, students in a common space of Higher Education, as the European, will be better informed taking the decision of

the university where they will move, in their right of the principle of mobility.

**PROJECTED STATUS BY THE CONFERENCE DATE**

The approach taken has been, in the first place, the collection of experiences from technical Spanish universities. In these moments on May 2006, we have joined 20 experiences provided and described by the participants in the project. This material is the main input for the elaboration of a model of description of ects experiences in Europe oriented to Technical studies in Higher Education.

By the Conference date, we expect to have elaborated an adequate model for the description of ects adaptation experiences, and the collection of a wide variety of different types of them. Besides, most part of the functionalities for the web site will be working.

Quality assurance is provided by the elaboration of indicators in the progress of the project as well as for the adequacy of the model proposed.

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