



## **New engineering: from knowledge to competences**

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One of the main innovations of Bologna system has been to link learning outcomes, ECTS workload based credits and competences. Competences represent a dynamic combination of knowledge, understanding, skills and abilities. Competences can be distinguished in subject specific and generic ones (instrumental, interpersonal and systemic competences).

Actually in Spain Engineering degrees are changing to the new University educational system and should aim to satisfy the real needs of European society. This change has been long and complex, particularly on the issue that have influenced curricular change Consultation with “actors” and “stakeholders”, the definition of academic and professionals profiles and the translation of these into desired learning outcomes.

Generic competences or transferable skills are relevant for preparing students well for their future role in society in terms of employability and citizenship. The criteria used by the companies to select their engineers are based in a good background and capacity to adapt and to acquire new knowledge, better than specific education, even postgraduate. It was interesting to note the great importance of generic competences

However, Spanish government has regulated conditions of core curriculum need for to guarantee the acquisition of the competences needs to exercise the correspondent professional activities. The new degrees should comply with the core curriculum if the graduates want maintain the legal attributions guaranteed actually by the Spanish Professional Associations. After these degrees, students can access to professional master with actually horizontal attributions of regulated professions.