MEDIS project addresses curriculum adaptation at Masters level of engineering schools of PC universities to incorporate in their curricula Advanced Industrial Informatics Specialization Modules (AIISM) for the efficient control of distributed and complex industrial processes.

This reform will allow formation of highly qualified engineers that will be easily integrated in the labour market. Moreover, the incorporation of these engineers to industry would achieve greater productivity, increasing competitiveness of companies, benefiting the development of the whole society.

To this end the wider objective of MEDIS is: Integration of a Problem Based-Learning methodology in Industrial Technology Masters Degrees for the Formation of High Qualified Engineers in the design of Advanced Industrial Informatics Systems based on Microcomputers, Industrial Computers and Mobile and Cloud Computing Platforms.

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A Methodology for the Formation
of Highly Qualified Engineers
at Masters Level in Design and Development of
Advanced Industrial Informatics Systems

The specific Objective are:

· Propose the PBL methodology and develop resources for teaching AIISM.

· Integrate AIISM in the specific curricula of PC.

· Design training courses and perform formation of PC teachers, technicians and administrative staff.

· Implement AIISM-PBL in PC and assist them during deployment.

· Assess the implementation of AIISM.

· Disseminate and exploit AIISM results among stakeholders.

The principal outcomes and outputs are:

· Design of AIISM-PBL methodology.

· Implementation of AIISM teaching resources.

· Adaptation of AIISM to specific curricula in PC.

· Development of training courses and assistance.

· Design of quality criteria and evaluation results.

· Design of dissemination plan (articles in journals and conferences, reports to distribute among stakeholders, articles for website and social networks).

· Development of sustainability and exploitation plan and build a network of stakeholders.