SYNERGY OF ENA-BME AND MEDIS PROJECTS FOR BIOMEDICAL ENGINEERING EDUCATION

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The BME-ENA Tempus IV Project "Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area" is devoted to the joint MSc Programs in Biomedical Engineering (BME) developing in four Eastern Neighbouring countries: Armenia, Georgia, Moldova and Ukraine. In the project there are two working groups involved from the two Ukrainian Partner universities: National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU "KPI") and Sumy State University (SSU) [1]. BME is one of the fastest growing areas of health care knowledge, medical equipment industry and multidisciplinary education. Nowadays, Biomedical Engineers must be prepared to meet existing and forecasted needs by means of knowledge, skills and attitudes that address the demands of the work environment in the broader health care related sector [2]. The MEDIS project is a complementary project to the BME-ENA project. It is also fulfilled within TEMPUS program. The project consortium includes five universities from European Union (Spain, Portugal, Germany, Bulgaria, and Sweden) and six universities from partner countries (Kazakhstan, Russia, and Ukraine). The main objective of the MEDIS project is the integration of a Problem Based-Learning (PBL) methodology [3, 4] in industrial technology Master's Degrees of the partner countries for the formation of high qualified engineers in the design of advanced and distributed industrial informatics systems based on microcomputers, industrial computers, and mobile and cloud computing platforms [5]. One of the most valuable achievements of the MEDIS project is the development of the teaching resources based on the PBL methodology in order to design the Advanced Industrial Informatics Specialization Module (AIISM). The methodology of the MEDIS project can be successfully used in other educational programs, including the program developed within the ENA-BME project. Another complementary matter is the equipment provided for the NTUU "KPI" within the MEDIS project. This equipment includes devices for digital signal processing which can be used for teaching biomedical engineering subjects as well.

Thus, joint efforts of two TEMPUS projects, ENA-BME and MEDIS, enable enriching both educational programs with additional value for students of the NTUU "KPI".

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