

REFERENCE:	144847-TEMPUS-1-2008-1-SE-TEMPUS-JPCR
-------------------	----------------------------------------------

TITLE:	Masters of Engineering in Sound & Vibration
---------------	--------------------------------------------------------

DESCRIPTION: There is a need to develop and strengthen a specialization in sound and vibration control in Egypt. The main objective of the project is to produce a new generation of engineers capable of performing constructive engineering work in the acoustics and vibrations field. The activities of this project will address the postgraduate students in a degree newly developed in Egypt called Masters of Engineering. The Masters of Engineering degree developed within this project will have a National Impact in the sense that it will be an example of how these types of degrees can formulated to serve the community and the industry. This degree will be developed in cooperation between universities, public authorities such as ministries, NGOs, government research institutions, and representatives from the industry. The Ministry of State for Environmental Affairs is an key partner in this project being one of the main end users of the graduates of this program.

The plan is to start running this degree during the third year of the project. It is important to start running the degree during the lifetime of the project so that any adjustments modifications can be done. The European partners will also assist the Egyptian teachers in running the first version of the courses.

A detailed study will be prepared on the similar existing programs in Europe, Egypt and the US. Based on this study, the consortium members will decide on all practical details of the project and the contents of the courses. The new program will follow the credit hour system; therefore, several courses in several pools will be available for the students to choose from depending on their specialization. Each course will require the students to do some measurements in the laboratory. The experiments will be of two kinds: 1. Computer experiments using dedicated software for simulation of sound and vibration problems to help in early design. 2. Measurement experiments using real instrumentation on real situations/machines. A new laboratory for Acoustic Emission will be established at the Arab Academy for Science and Technology.

The new Masters of Engineering program in Sound and Vibration will be planned following the recognized ECTS system widely implemented in Europe, which will encourage the student exchange between the consortium partner universities. It is planned to certify the new degree as a joint degree between the Ain Shams University (ASU) in Egypt and the Royal Institute of Technology (KTH) in Sweden.

COORDINATOR: Kungliga Tekniska Högskolan (KTH)
Teknikringen 8
Stockholm, SE
Phone: 4687908021
Fax: 4687906122
Email: hansbod@kth.se
Internet site address:

CONTACT: Associate Professor Bodén Hans

PARTNERS:

- **Ain Shams University, EG**
Tamer Elnady, Assistant Professor, Faculty of Engineering, Design and Production Engineering Department
- **Aalborg University, DK**
Sergey Sorokin, Professor, Faculty of Natural Science & Engineering, Mechanical Engineering Department
- **Katholieke Universiteit Leuven (K.U.Leuven), BE**
Wim Desmet, Professor, Faculty of Engineering, Mechanical Engineering Department
- **LMS International NV, BE**
Herman Van der Auweraer, Corporate RTD Director
- **Braunstein + Berndt GmbH, DE**
Jochen Schaal, Marketing Manager Europe
- **Nile University, EG**
Wael Akl, Assistant Professor, School of Engineering and Applied Sciences
- **Elaraby Group, EG**
Mohamed Elaraby, Managing Director
- **Helwan University, EG**
Radwan Abdel Hamid, Full Professor, Faculty of Engineering, Electrical Machines and Power Department
- **Ministry of State for Environmental Affairs, EG**
Mona Kamal, Assistant Director, Noise Department
- **Housing & Building National Research Center (HBRC), EG**
Mahrous Abdel Gawad Saif, Head of Acoustics Department
- **Mechanical & Electrical Research Institute, National Water Research Center , EG**
Samir Abdel-Rahman, Deputy Director
- **Acoustical Society of Egypt, EG**
Adel Elsabbagh, Treasurer
- **Arab Academy for Science and Technology and Maritime Transport , EG**
Mohamed Shehadeh, Assistant Professor, Faculty of Engineering and Technology, Mechanical and Marine Engineering Department

ESTIMATED BUDGET: 989,082 € (EG Share: 65%)

CONTRACT DURATION: 36 months