BEMT

Co-funded by the Erasmus+ Programme of the European Union

Erasmus+KA2 BEMT

Project Title:

Integrating Blended Entrepreneurial and Manufacturing Technology Competency into Socioeconomic Development in Egypt [BEMT]

Project Partners:

ASWAN UNIVERSITY

Nile University

MSME مشاريع مصر ENTERPRISE DEVELOPMENT AGENCY

مؤسسة مصر الخير تنمية الإنسان .. مهمتنا الأساسية

Hochschule Karlsruhe Technik und Wirtschaft UNIVERSITY OF APPLIED SCIENCES

UNIVERSIDAD DE OVIEDO

Turun yliopisto University of Turku

Scope of Work:

BEMT is an Erasmus+ KA2 Project aimed at Integrating Blended Entrepreneurial and Manufacturing Technology competency for the purposed of socioeconomic development in Egypt. In BEMT, graduates from engineering and technology institutions receive an intensive training on manufacturing technologies and SME management basics. The objective is to prepare

these graduates to start the small manufacturing businesses that become part of the feeding industries in Egypt. The program also supports the startups through providing networking, funding and market penetration assistance.

It is, therefore, the aim of the **current project to develop a new line of small-business owners with engineering background grasping in-depth knowledge and expertise in manufacturing technology with adequate entrepreneurship skills** capable of establishing a sustainable small manufacturing business that falls under the micro economy spectrum and who are capable of establishing successful and profitable business relationships with large enterprises in EG and the open market in general as a feeding/end-user products industry with competitive production quality.

The program consortium includes 4 universities from Egypt: Nile University, Ain Shams University, Arab Academy of Science and Technology and Aswan University; 3 universities from EU: University of Oviedo, Spain, Karlsruhe School of Applied Sciences, Germany and University of Turku, Finland. Finally, the consortium includes 3 nonacademic partners which are Industry Training Council, The Egyptian Chamber of Engineering Industries and Misr El Kheir Foundation.

Outlines and Focus:

The consortium members were selected to map the project aim into actual achievable processes and outcomes. The aim of introducing a new line of successful entrepreneurs in manufacturing technology sector as a role model, who can integrate in the industrial production system in EG and matching end-user quality standards requires 4 main interacting development lines;

- Manufacturing technology
- Entrepreneurship
- Industry linkage
- Start-up business support

The project aims at developing a new line of self-sustained technical- and business-competent engineering entrepreneurs specialized in manufacturing technology. These shall be a role model for a line of knowledge-based start-ups grasping the market- and factory- knowledge needed for sustainability and integration within the feeding industries and end-user production system. The proposed program is based on continuous and lifelong education principles. Its objective is to compliment the university education with practical implementation expertise in manufacturing technology blended with small business development knowledge through the focus on the following tracks;

- Conventional manufacturing (Milling – Turning – Grinding – Gear Cutting),
- Non-conventional manufacturing (ECM – EDM – laser cutting – water jet machining),
- Sheet metal work technologies (press technologies – sheet metal die design),
- Joining operations (Arc- and electrical resistance welding),
- Polymer processing operations (injection and extrusion molding – die design and manufacturing),
- CNC