

561929-2014-JP-HES

Integrating Blended Entrepreneurial and Manufacturing Technology Competency into Socioeconomic Development in Egypt (BEMT)

Specific Objectives:

- Develop comprehensive gap analysis of manufacturing industries production scale and technologies and entrepreneurship models in EG and similar countries.
- Develop a manufacturing technology entrepreneurship education and training program integrating manufacturing technology core with small-business development.
- Develop technology-based education modules for engineers covering 6 technologies with in-depth practical implementation.
- Develop business development and entrepreneurship training modules for engineers.
- Establish sustainable industry links with the new enrolled entrepreneurs to facilitate products specification and establish market demand.
- Establish a sustainable network of start-up funding agencies, develop start-up process and procedures and establish a link with the enrolled new engineering entrepreneurs.
- Train EG trainers/teachers in manufacturing technology/entrepreneurship.
- Implement the developed continuous education program during the project lifetime

Project Summary:

An interdisciplinary manufacturing/business entrepreneurship continuous learning system is introduced aiming at developing a new line of small-business owners with engineering background grasping in-depth expertise in manufacturing technology with adequate entrepreneurship skills capable of establishing a sustainable small manufacturing business within micro economy spectrum. Although, manufacturing technology industries are deep-rooted in Egypt, recent statistics indicate a significant retreat in supply-to-demand ratio revealing a completely abandoned industry domain that is eligible and feasible to flourish in different business size models, particularly in micro/small domains, which are most suitable in heavily populated countries with economic hierarchy similar to the one in Egypt. Hence, a post-university continuous learning program is developed targeting graduates with mechanical/industrial engineering background, which blends manufacturing technology expertise and business- and technology-management skills in two fundamental learning modules each spanning over 96 contact hours, followed by 6 technology-specific tracks, 96 hours each, with extensive hands-on and practical training resulting in graduates mastering both technology and business development competencies. The targeted technologies map the actual industry needs and range from conventional to advanced computer-controlled types. A comprehensive web-based training complements the machine-shop practice to deepen the technology expertise fulfilling today's demands in quality and cost competitiveness. The learning system finally ends with participants developing their own business plan and are engaged with public authorities, feeding-to industries and funding entities to process the start-up they were trained and prepared for, thus completing the continuous learning process cycle with an expected wide impact on the industry and the community in Egypt at large both from social and economic perspectives.

Project Consortium

1. Applicant Organization: Universidad De Oviedo, Spain

List of Partners (National Project)

2. Hochschule Karlsruhe Technik und Wirtschaft , Germany
3. Turun Yliopisto, Finland
4. Ain Shams University, Egypt
5. Aswan University, Egypt
6. Nile University, Egypt
7. Arab Academy for Science, Technology and Maritime Transport, Egypt
8. Industrial Training Council, Egypt
9. Chamber of Engineering Industries, Egypt
10. Misr Elkheir Foundation, Egypt

Total Grant Requested: EUR 916,166.00

Special Mobility Strand Additional Grant: No

Duration: 36 months