3DPRINT-DnB

Funded by the Erasmus + Programme Of the European Union

"Curriculum development and delivery on 3D FDM printer design and build for final year UG engineering degree programme"

Project Summary

The manufacturing industry plays a key role in the EU economy – it generates about 6% of the EU's GDP and employs over 48 million people – and is considered the most important sector for achieving the "Europe 2020" growth strategy goals. However, the sector's recent decline and growing competition from non-EU regions has created the need for efficiency gains and sustainable practice across the sector. Additive Manufacturing (AM) or 3D printing has transformed innovation in the engineering and manufacturing industry, and the EU has identified AM as one of 6 Key Enabling Technologies (KETs). The European Industrial Policy for KETs aims to increase the exploitation of KETs and to reverse the decline in manufacturing as this will stimulate growth and jobs. The 36 months, €264k EU Erasmus + funded 3DPRINT project (Project Code: 2018-1-UK01-KA203-048230) will contribute to the achievement of the "Europe 2020" growth strategy goals

Project Duration:
36 months
Overall budget:
€ 264 000
Project Code:
2018-1-UK01-KA203-048230

Project Consortium:

- University of Wolverhampton **(UoW)**, UK
- Karabuk University **(KU)**, Turkey
- Gazi University **(GU)**, Turkey
- Bellyfeel **(BML)**, UK
- US Mekatronik Makina Otomasyon Ltd **(USMM)**, Turkey
- Satakunta University of Applied Sciences **(SAMK)**, Finland

Aims of 3DPRINT Project

3DPRINT aims to create an innovative introductory joint AM curriculum for UG group project work. Specific aims include to:

a. *Enhance the quality and relevance of student's knowledge and skills (employability and entrepreneurship), improving opportunities for entry into AM jobs.*
b. *Enhance learning through the digital literacy of target groups who will engage in digital manufacturing activities (including 3D Printing Competition for local Schools).*
c. *Increase the awareness and attractiveness of careers in STEM and Art and Design through the creation of high quality joint AM curriculum (also improving gender balance in STEM).*
d. *Increase opportunities for the achievement of relevant and high quality skills and competencies in STEM which are in high demand in the aero, auto and food manufacturing sectors.*

Impact of 3DPRINT Project

The potential impact of 3DPRINT includes the following:

a. *Increase interest in AM and STEM careers*
b. *Improve transition to HE*
c. *Increase innovation and entrepreneurship and number technology business start-ups*
d. *Increase transition to Higher Education*
e. *Improve gender balance on STEM degree courses and careers.*

Longer term benefits

The project will support graduates in their career development and attract interest in the aero, auto and food manufacturing sector. The project contributes to the EU's Education and Training 2020 strategic framework objectives by increasing student and teacher mobility and improving teaching quality.

3DPRINT Project Link:
http://www.3dprintproject.org/.