

PILOT ACTION EVALUATION

DT252 - PP5 - Partner Report on Pilot 3

Version 1
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1. Short overview of the Pilot Action

FabLabs are technical prototyping platforms for innovation and invention inviting a society at large to become innovators. University Fablab “strojLAB” is platform for all students on Faculty of Mechanical Engineering. The Fablab supports novel non-frontal education approach on Institute of Machine and Industrial Design based on project learning system and is implemented directly into education program:

Support of project base learning courses

Master degree program M2I-P Mechanical Engineering, branch: Mechanical Engineering Design
Branch Mechanical engineering covers also subjects focused on project base learning education and team work. The aim of the subjects is to learn theory and practically improve the knowledge via projects. The projects cover digital technologies, CAD, FEM, tribology and technical diagnostic. Outcomes of subject are typically functional mechanical mechanisms, devices, prototypes. Fablab supports the implementation of student’s semestral projects and diploma projects within the subjects: Team Project (FSI-ZKP), Mechanical Design Project (FSI-ZIP), Engineering Project (FSI-ZKR), Diploma Project II (M-KSI, M-PDS) (FSI-ZD5), Machine and Process Control (FSI-ZAE)





2. Lessons learnt

Students learn via “Learning by doing” and “Do it yourself (DIY)”. They cooperate in workgroups and they must finely manufacture functional product. It is assumed basic knowledge of CAD modeling and machine parts.

Stop Doing

- Teaching CAD base knowledge in master degree program

Keep doing

- Project base learning and team work - Students receive feedback and will realize what a knowledge is theoretically mastered and what is not
- Open access to 3D printers and another equipment

Start doing

- We began to address the student community regularly and promote the Fablab idea
- We are looking for students enthusiasts

4. Sustainability

Fablab is implemented into Master's study program subjects as project learning support. Students use Fablab equipment to design and implement functional products. Costs of material will be sponsored by Institute of Machine and Industrial Design.

Students obtain an information about Fablab integration directly from the subject's description:

“This course was supported under the FabLabNet project from the European Regional Development Fund within the programme "Interreg Central Europe". The course uses facilities of the open-access student workshop "StrojLab", built with the support of Institute of Machine and Industrial Design and the FabLabNet project.”

Supported courses:

Engineering Project (ZKR)

Mechanical Design Project (ZIP)

Team Project (ZKP)

Machine and Process Control (ZAE)

Printscreen

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