

Course Description

Interdisciplinary Projects

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Project Consortium: University of Applied Sciences Magdeburg-Stendal (Germany); Aalborg University (Denmark); Lapland University of Applied Sciences (Finland); University of Lincoln (United Kingdom); University of Ljubljana (Slovenia); Potsdam University of Applied Sciences (Germany); Tampere University of Applied Sciences (Finland); University of Tampere (Finland); YMCA University of Applied Sciences (Germany)

Interdisciplinary Projects

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Abstract

Interdisciplinary project encourages co-creation of students, companies, institutions and universities. Companies or institutions propose real problems, which are being solved by multidisciplinary teams of students, working under supervision of companies or institutions and professors and assistants. The aim of the project is to generally solve the project problem and, if feasible, prepare a working prototype. Student teams have limited time to achieve this goal. A common working space is available to student teams, where they can exchange creative ideas with other students, business and institutions representatives and professors.

Course Description

The objective of the course is to train students to work creatively in multidisciplinary teams to solve complex project problems.

The course work stages are:

- 1. formation of student groups,
- 2. detailed comprehension of the project problem,
- 3. consultations with the supervisor from the company or institution and the faculty,
- 4. creative team work on solving the problem,
- 5. presentation of interim basic solutions to the faculty and the company or institution,
- 6. possibility of the actual realization of the solution to the problem (product prototype)
- 7. final presentation of the project problem solution.

The competences students will gain are practical application of different



already acquired specific professional competencies and their complementary application within group work.

The intended learning outcomes from the course are:

- Knowledge and understanding: knowledge of work dynamics in multidisciplinary teams, understanding of fundamental principles of project work, understanding relationships between different skills and procedures for solutions of project problems.
- Transferable/key skills and other attributes: competence for solving problems in an multidisciplinary and multicultural team, communication in multidisciplinary and multicultural project team, ability to present solutions and ideas to the public, evaluation of the potential success of a basic solution.

Collaboration Mode

- Mutual Consultation: Two or more partners agree on a day where they want to meet online. The students make short presentations, then they consult each other (e.g. using Adobe Connect breakout rooms). This may or may not involve co-creation, depending on the tools chosen.
- Parallel Assignments: Student groups from different universities work on the same assignment.
- Complementing Assignments: Student groups from different universities work towards the same goal, but in loosely coupled work packages. integrated project / virtual team: Students form real virtual teams, with intensive collaboration (and intensive coordination needs).
- Virtual Pairing: Special form of a virtual team where students can concentrate on one-to-one creative online collaboration. synchronous collaboration: Collaboration using live tools like chat, google docs live editing and online conferencing software.
- **Asynchronous Collaboration:** Using asynchronous communication tools like forums, shared documents, shared folders. A particular interesting form of asynchronous collaboration are Design Thinking processes where each partner builds on the existing work of the other partner.
- Synchronous Collaboration: Collaboration using live tools like chat, google docs live editing and online conferencing software. Please note that this was restricted to iterative design feedback only.



Duration, Intensity & ECTS

Full semester, next implementation to run in winter semester October

2017 - February 2018

30 hours of lectures, 60 hours of tutorials and 90 hours of individual work

6 ECTS are assigned for this course

Platforms

No other platforms were specifically used as part of the challenge was for each group to decide for themselves which tool would work for all. Most groups however opted for a combination of Facebook (Private groups for each working party) and Google Drive (Group working and sharing).

- Google Drive
- Dropbox
- Skype
- Facebook groups and other social media

E-CHO Cloud and corporate learning management environment: http://www.e-cho.org/

Curriculum

Will be available at: http://maker.si/ip/

Experience Report

Lecturer perspective:

"It offers students something that they will never get by only sitting in school benches. By participating in the course, students gain the knowledge, experience and skills and prepare them to work in the real world."

"A real working concept, how to motivate multidisciplinary groups of students and help them start thinking and working out-of-the-box."

Student perspective:

"The course has provided us the environment and the opportunity to test our knowledge and skills in a real (business) world."

"The course is an excellent opportunity to implement your ideas and prove your skills in real projects in cooperation with companies or other organizations."

Material

http://maker.si/ip/

http://www.fe.uni-lj.si/izobrazevanje/2 stopnja/elektrotehnika/predmeti/2014122911253029/

Literature

1. K. Ulrich, S. Eppinger, Product Design and Development, McGraw-Hill, 2011

- 2. S. Berkun, Making Things Happen: Mastering Project Management, O'Reilly Media, Revised edition, 2008
- 3. E. Ries, The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, Viking, 2011
- 4. C. Heath, D. Heath, Made to Stick: Why Some Ideas Survive and Others Die, Random House, 2007
- 5. O. Klaff, Pitch Anything: An Innovative Method for Presenting, Persuading, and Winning the Deal, McGraw-Hill, 2011