Offered by
ICT Engineering

IT-INO1

2.0

Engineering Innovation (ICT)

ECTS
5

Prerequisites

Main purpose

Knowledge
After having successfully completed the course, the students will have gained:

An understanding of their own professional identity in and of itself, as well as contrasted and compared to other fields of engineering
An understanding of innovation and its uses within the field of engineering
Knowledge about innovative processes within the field of engineering

Skills
After having successfully completed the course, the students will be able to:

Engage in innovative processes in a Cross-/inter-/multidisciplinary setting in order to conceive, plan and execute their ideas
Work methodically with innovation
Apply relevant models to the implementation of product and concept development

Competences
After having successfully completed the course, the students will have gained competences in:

Introducing innovative ideas into project work
Assess when innovation is needed and what the value of initiating an innovative process will be
Contributing own professional skills in teams with the objective of solving problems by using innovative processes and models

Topics
Clarifying multidisciplinary group competencies
The history of the engineer and engineering
VIA engineering in an innovative perspective
Field research
Field trip
The 4D model: Discover, iDiate, Design and Deliver
Process reflection
Innovation competition

Teaching methods and study activities
Engineering Innovation is a three-week comprehensive course in which the students work partly in their own faculty (one week, see separate description) and partly cross-faculty in VIA Engineering (two weeks):

Week 49-50: Working in multidisciplinary groups in VIA Engineering (Monday December 4 – Friday December 15, 2017) .Throughout the course, the students will work in groups gaining innovative tools and using these for solving specific challenges posed by actual companies. Additional information about the content and scope of the group challenges and deliveries will be announced during week 49.

External partners from the companies who posed the challenges assess the students. The students are assessed in terms of their written deliveries and their oral presentation, emphasis being on their idea, the process described for working with the idea, and the final product and/or solution.

Resources

Evaluation
In order to qualify for an approval, the students: Must have an attendance of 100% at the Engineering Innovation during the three-week period.

Examination

Group presentation of project Friday December 15.

Grading criteria
Full participation in all activities during the course (check-in/out each day). Approved/not-approved.

Additional information

Responsible
Behnam Boujarzadeh

Course type
ICT Engineering;Compulsory Course for all ICT Engineering;Business Information Systems;Cross Media;Embedded Engineering;

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