MF2065 Innovations for the Emerging City, Openlab Multi-disciplinary Project Course 15.0 credits

Innovationer för den växande staden, multidisciplinär projektkurs inom Openlab

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Valid from autumn 2019.

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Bachelor's degree

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

On completion of the course, the student should be able to:

- Identify, analyse and present context and target group

- Relate scientific perspectives to different practices

- Develop, plan and evaluate new innovation ideas

- Apply interactive and creative work and design methodology

- Visualise and shape innovation projects through sketches, models and prototypes

- Identify and analyse complex phenomena and present new innovation ideas that can be developed and implemented to be of lasting use and value for a specific target group

- Design an organisation for multidisciplinary project co-operation

- Handle problems that are incompletely specified by making reasonable assumptions

- Be able to communicate orally and in writing:

Different aspects of cooperation and innovation, reflections on your own behaviour in work groups and relate it to the work group's dynamics

Concepts, progression and final results of an innovation work to non-specialists from outside the subject area

Applied work process and implemented results to the project provider and other external interested parties

Course contents

The course aims to give the student the opportunity to design innovative and user adapted proposals vis-à-vis an external client. The student should be given the opportunity to develop and evaluate new concepts of innovations that can be implemented to create lasting use and value for a specific target group. In projects, the students learn to identify, organise, design and evaluate innovation work. Through knowledge and practices from different knowledge fields and scientific perspectives, the students learn about idea and business development, user involvement, cooperation and operational planning. The students are also given tools to apply interactive and creative work and design methodology to be able to handle incompletely specified problems and even so make reasonable and independent assumptions.

Subject areas: development of ideas, the user involvement, integration, cooperation, communication, design methodology, project methodology

Examination

- PRO1 - Project Work, 15.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

- Participation at lectures and seminars within chosen development project

- Written and oral presentation of innovation project

- Individual written reflection

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.