MF2080 Challenges for the Emerging City, Interdiciplinary Project Course A:1 (OpenLab Project Course) 7.5 credits

Utmaningar för den växande staden, tvärdiciplinär projektkurs A:1 (OpenLab projektkurs)

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

Establishment

On 2018-11-26, the Head of School of ITM has decided to establish this official course syllabus to apply from the spring semester 2021 (registration number M-2018-1932).

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Completed courses of 180 credits in the main area of the education or equivalent.

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 early phase of innovation project through sketches 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:

1. Different aspects of cooperation and innovation, reflections on your own behaviour in work groups and relate it to the work group's dynamics
2. Problem definition, idea and the concept delivery vis-à-vis non-specialists outside the own subject
3. Applied work process and implemented results to the project provider and other external interested parties

Course contents

The course aims to give student possibility to design innovative and user adapted proposals vis-à-vis an external employer. Student should be given the opportunity to develop and evaluate new ideas for 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 incomplete given problems while still making reasonable and independent assumptions.

Examination

- PRO1 - Project, 7.5 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.

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

Examination of PRO1 implies:

- written and oral presentation of innovation project,
- participation in lectures and seminars related to development 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.

Additional regulations

There are courses that have the same content: MF2065 is overlapping.
MF2080 and MF2081 together correspond to MF2065.