MG115X Degree Project in Product Realization and Industrial Engineering, First Cycle 15.0 credits

Examensarbete inom produktframtagning och industriell ekonomi, grundnivå

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

Course syllabus for MG115X valid from Spring 2024

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

The specific prerequisites for a degree project of 15 credits at undergraduate level are: courses of at least 120 credits from the syllabus years 1-3 must be completed for students in programme where the degree project begins in period 3.

And admitted to CINEK3 PFRI or CINEK3 PPUI.

Language of instruction

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

Intended learning outcomes

After passing the degree project course, the student should be able to:

- independently identify, formulate, assess and handle problems within the "Product realization and industrial engineering" subject area
- show a basic ability to apply knowledge, methodology and skills that have been acquired during the education, on problems within the subject area
- account for the scientific basis and applicable methods within production engineering and display deepened knowledge within some part of this subject area
- analyse the need of scientific information, carry out information retrieval, evaluate the received information and identify his need for additional knowledge
- critically discuss phenomena, issues and situations within the subject area "Product realization and industrial engineering", considering relevant scientific, social, ethical and sustainability aspects
- illustrate and describe how technology, economics and leadership issues interact in for a given problem
- plan and carry out assignments within given time frames, with relevant methods
- orally and in writing account for and discuss information, problems and solutions, in dialogue with different groups:
  - present the work in a scientific report that fulfills the given requirements on contents, structure and language
  - in the report, refer to sources, figures, tables and formulae, in an established way
  - write a summary of the report in English with correct use of the terminology of the subject
  - carry out oral presentations with requirements on keeping to time limits, clear contents, language, delivery and illustrations
  - review and comment on another degree project work and be able to respond to criticism on ones own work
- show such skills that is required to work independently within some part of the main field of study, i.e. "Technology"

Course contents

A common theme within which the students independently should formulate their own problem

Inspirational lectures on the given theme

Supporting lectures on scientific work method: information retrieval, report writing, etc.

Oral presentations at seminars

During the whole course: independent work with problem formulation, information retrieval, project planning and project follow-up, oral presentations and report writing

Examination

- XUPP - Examination Question, 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.

Other requirements for final grade

Approved examination question (XUPP; 15 credits)

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.