



MG2019 Integrated Production

12.0 credits

Integrerad produktion

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 MG2019 valid from Autumn 2007

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

4K1101, 4G1634, 4K1111, 4K1204

Language of instruction

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

Intended learning outcomes

After havin gpassed this course the student should be able to

- Analyse and structure the information needed for the development and production of a product during its lifetime, from the “idea to recycling”
- Use tools for analyse, development and the operation of manufacturing systems.
- Manage or participate in project for development of product and manufacturing systems with consideration of all aspects from the customers need to economic efficiency in the production.

Course contents

Quality Function Deployment, QFD.

Design for Assembly and Manufacturing, DFA, DFM.

Modular function deployment, MFD.

Discrete event simulation.

Supply chain management.

Maintenance (TPM).

Modelling of “virtually factories”.

Product data management, PDM.

Flexible automated assembly systems.

Course literature

Course compendium available at the Dept. of Production Engineering

Examination

- PRO1 - Project, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 - Examination, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercise, 3.0 credits, grading scale: P, F
- ÖVN2 - Exercise, 3.0 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

Exercises, (ÖVN1; 3 credits)

Exercises, (ÖVN2; 3 credits)

Project work (PRO1; 3credits)

Written examination (TEN1; 1,5 credits)

Written examination (TEN2; 1,5 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.