



ML2301 Production Management and Development 9.0 credits

Produktionsledning och produktionsutveckling

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

Establishment

Course syllabus for ML2301 valid from Autumn 2019

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering, Industrial Management

Specific prerequisites

Completed course ML1503 Industrial systems II, 6 credits or the equivalent.

Completed course Bachelor thesis, 15 credits or the equivalent.

Language of instruction

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

Intended learning outcomes

After passing the course, the students should be able to:

- Define and explain production management, Lean management and methods for follow up and control.
- Describe production strategies for industrial production and relate these to management and control.
- Describe and explain how incremental and radical development of production systems can be managed, as well as their connection to the operational phase and the production organisation.
- Describe and analyse processes for introduction, industrialisation and scale up of production.
- Describe and compare theories about how company groups develop and control their production network and locate their production globally.
- Relate the increased digitisation in production to industrial production management and analyse how it can change management processes.
- Relate environmental, social and economic sustainability to industrial production management and how it is integrated in both the development and operational phases.

Course contents

The overall aim of the course is that students should increase their understanding and knowledge of production management in the development and operational phases in an industrial context. The course contains a number of important subareas and issues in the area of production management as well as methods and models that are used to lead and control industrial production activities. The course highlights the importance of the production organisation for development and operation of production system and show how change managed for incremental and radical changes, including specification and purchase of production equipment. The course also contributes to an increased understanding of the possibilities to have an impact on production sustainability, in both developmental and operational phases.

Examination

- TEN1 - Written exam, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- INL1 - Project, 5.0 credits, grading scale: A, B, C, D, E, FX, 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.

The examiner decides, in consultation with KTH's coordinator for disabilities (Funka), about possible adapted examination for students with documented, permanent disabilities. The examiner may permit other examination format for re-examination of individual students.

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.