



MG1024 Production 6.0 credits

Produktion

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

Establishment

Course syllabus for MG1024 valid from Spring 2012

Grading scale

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

Education cycle

First cycle

Main field of study

Mechanical Engineering, Technology

Specific prerequisites

MJ1103 Introduction to Mechanical Engineering

Language of instruction

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

Intended learning outcomes

After the course, you can:

- Describe the role that industrial production has in the community and company.
- Analyzing the structure's role in entrepreneurship
- Describe how a production system can be designed
- Analyze advantages and disadvantages of different production flows
- Explain the importance of customer order point position
- Describe and implement a simple, Material Requirements Planning activity
- Explain the advantages and disadvantages of automation
- implement a line balancing of an line
- Implement a simulation of a production section

Course contents

This course provides an introduction to the area of production. We use bird's-eye perspective and give you a description of a producing company's strategic goal and then moving to the operational activities of the production. You can then easily explain what guides the daily decisions or the longer term production trends. A successful company has a well-defined goal for their business. The goal, in turn, is likely a result of the company is a formulated business idea or business strategy. The strategy is a way to create consistency in an organization so that all movements in the same direction with a common goal. The strategies are often formulated for various functions in the organization. A goods-producing firms has formulated a: Market Strategy, Product Strategy, Finance Strategy and Production Strategy.

Disposition

The course structure consists of the course literature. The lectures illustrate how different companies deal with the activities in the text book . Exercises provide you the opportunity to work with the various elements of the course. A study visit at the beginning of the course gives you an experience of a producing unit. Laboratory work, where you come in contact with a simulation tool providing practical experience.

Course literature

Strategi och produktionsutveckling. Handbok för utformning av produktionsstrategi och för det framtida produktionssystemet 2008 WoxénCentrum KTH Industriell produktion SimuleringKompendium

Equipment

None

Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TEN1 - Written exam, 3.0 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.

Final grade: 80% attendance and passed examination parts.

Other requirements for final grade

Requirements for a final grade is at least 80% attendance and passed examination parts.

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.