



Course syllabus

Faculty Board of Science and Engineering
School of Engineering

2MT006 Operations Management, 7,5 högskolepoäng
Operations Management, 7.5 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Organisational Committee 2009-11-16

The course syllabus is valid from autumn semester 2010

Prerequisites

Two-year study in Industrial Engineering, -Business, or - equivalent program.

Expected learning outcomes

The purpose of the course is to give the students:

- Knowledge of strategic implication of logistics decisions
- Advanced knowledge about the role of production management and inventory and production control
- Applied knowledge of methods for lot sizing
- Problematized knowledge on a more profound level of a limited theoretical logistic problem linked to production.
- Knowledge of procurement and distribution systems

Content

The course consists of the following elements:

- The role of Production management in the logistics system.
- Material planning and control; techniques and methods for planning/control of material flows in different planning

horizons and production environments. Methods with particular focus are master production scheduling, order planning and operations planning.

- Methods for lot sizing.
- Procurements: suppliers selection-evaluation.
- Distribution and transportation systems

Type of Instruction

Teaching consists mainly of lectures, group-work, seminars, and exercises. Cases (project works), guest lectures and field visits could also be part of the course. Participating in caseseminars, field visits and guest lectures are compulsory.

Examination

The course is assessed with the grades U,3,4 or 5.

The students' performance can be evaluated through assignments, small written exam (s), seminars, written reports of project work (case studies), presentation and opposition and written and/or oral exam of the compulsory work. One is required to pass on all parts.

Course Evaluation

When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

Required Reading and Additional Study Material

Required reading

Nahmias, Steven, *Production and Operations Analysis*, McGraw- Hill, Latest edition. 500 pages.

Relevant articles