



ME1308 Operations Strategy for I 6.0 credits

Industriell verksamhetsledning för I

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

On 2024-03-15, the Dean of the ITM School has decided to establish this official course syllabus to apply from autumn semester 2024 (registration number M-2024-0542).

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

ME1314 Introduction to Industrial Engineering and Management completed

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 student should be able to:

1. Explain how industrial and other activities can be designed and how new technical solutions influence process choices and process design,
2. Explain how value adding processes can be planned and controlled and how external uncertainties and disturbances influence decisions about capacity dimensioning, both in production and in service activities,
3. Explain how business processes can be designed and organised based on human preconditions and needs,
4. Explain how companies can design, plan and control their supply chains in an optimal way,
5. Explain how companies can organise and lead development of new value offerings, regarding both product and service innovations,
6. Describe different business strategies and explain how these can be used to implement a general company strategy and identify which possibilities and obstacles that can exist in industrial strategy work,
7. Describe how responsibility and sustainability can be incorporated in the strategy work.

Course contents

The aim is, that the course participants on completion of the course understand how different types of industrial activities are designed and are led and how they should be prepared to participate in analysis and implementation of industrial business strategies. The course gives an introduction to key concepts and models in the area of operations management. Different ways to design the activities are highlighted by bottlenecks and limitations in resources and processes are analysed and connected to costs for resource consumption and performance. Different types of analysis models are presented, and choice of strategy for business development is discussed. Specific perspectives such as responsibility and sustainability are emphasised. The course consists of thematic modules that contain lectures on basic concepts and models and numerical exercises, seminars and business simulations that deepen and concretises the learning.

Examination

- SEM3 - Seminars, 1.0 credits, grading scale: P, F
- TENA - Examination, 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.

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.