



ME2013 Operations Management: Organization and Control

6.0 credits

Produktion: Organisation och styrning

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

Establishment

Course syllabus for ME2013 valid from Autumn 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

Basic course in industrial Management or similar.

Language of instruction

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

Intended learning outcomes

The overall aim of the course is to give participants comprehensive knowledge on operations management in different types of industrial operations. After passing the course successfully, the student shall be able to participate in industrial operations management in their respective technological areas.

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

- Describe why and how Operations Management can be used to enhance the competitiveness of modern industrial organizations
- Describe the structure of Operations management as a field of knowledge and explain basic concepts of the field
- Describe what main work responsibilities inherent in practical operations management
- Describe what economic trade-offs and compromises required in an operations system, and what tools and models that can be used for such analyses
- Describe the Toyota system and other modern manufacturing philosophies, and explain how these are used in practice
- Describe what possibilities and barriers that may appear in industrial improvement work, and state advantages and drawbacks of different change strategies
- Perform a general analysis of a simple manufacturing system, aiming at identifying improvement areas from technical, economical and organizational perspectives

Course contents

The importance of operations for a market. The role of operations and its relations to other activities in a company and between companies. The historical development of operations management, and its different technical and organizational functions. The meaning of productivity and effectiveness. Capital use in manufacturing. Automatisations of manufacturing. Manufacturing functions, work organization and motivation. Enterprise resource planning. Improvement work in contemporary operations and product development work. Service management and operations.

Course literature

Operations Management, 5th Edition by Slack, Chambers & Johnston. ISBN 140584700X, Pearson Education.

Examination

- SEM1 - Seminar, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 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.

Other requirements for final grade

Written exam, participation in seminars, Group project report.

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.