ME2065 Operations and Supply Chain Strategy 6.0 credits

Produktion och Supply Chains

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

Establishment

Course syllabus for ME2065 valid from Autumn 2010

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

ME1001 Industria management (or equivalent) and 120 hp.

Documented proficiency in English B or equivalent.

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 the strategic management of operations and supply chains in different types of industrial and technology based firms. After passing the course successfully, the student shall be able to analyze industrial systems as well as particpate in, improve and lead change efforts in their respective technological areas.

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

- Describe why and how operations and supply chain can be used to enhance the competitiveness of modern industrial firms.
- Explain basic concepts of the field of operations and supply chain strategy.
- Describe main work responsibilities inherent in practical operations and supply chain management.
- Describe what economic trade-offs and compromises required in operations systems and supply chains, and what tools and models that can be used for such analyses in the pursuit of value creation.
- Desscribe the philosophy of lean manufacturing, and explain how it is used in practice.
- Describe what possibilities and barriers that may appear in industrial continuous improvement work, and state advantages and drawbacks of different change strategies.
- Peaform a general analysis of simple operations and supply chains, aiming at identifying improvement areas from technical, economical and organizational perspectives.

Course contents

The importance of operations and supply chain management in the modern economy. The role of operations and its relations to other value creating activites in a company and between companies. The historical development of operations and supply chain management, and its different technical and organizational functions. The meaning of productivity and effectiveness. Capital use in manufacturing. automatisation of manufacturing. Manufacturing functions, work organization and motivation. Enterprise resourse planning. Improvement and organizational change work in contemporary operations. The relation between operations and product development work. Service management and operations. Industrial leadership.

Course literature

Slack, N. & Lewis, M. Operataions Strategy. London: Financial Times/Prentice-Hall. 2nd edition or later.

Examination

- TEN1 - Examination, 6.0 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 examination

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.