Manufacturing Strategies

Programme course

6 credits

Produktionsstrategier

TPPE16

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial Engineering and Logistics

Date determined
2017-01-25

Main field of study
Industrial Engineering and Management

Course level
Second cycle

Advancement level
A1X

Course offered for
- Mathematics, Master's Programme
- Design and Product Development
- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Mechanical Engineering, M Sc in Engineering

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
Basic knowledge in production/operations management

Intended learning outcomes
The aim of the course is to present the strategic perspective of the manufacturing function. Special attention is paid to the holistic view of manufacturing, the competitive priorities of the manufacturing firm and the interfaces with other business functions. After taking this course, the student should be a ble to analyze the role of manufacturing in the corporate strategy and formulate a consistent manufacturing strategy. The student should also be able to communicate results and conclusions and be able to critically reflect upon the analysis made of other groups related to manufacturing strategies.

Course content

- Manufacturing Strategy: Relationship to corporate strategy and functional strategies. Manufacturing philosophies.
- Competitive Priorities: Quality, delivery speed and reliability, cost effeceincy, flexibility. Order winners and order qualifiers. Special focus on manufacturing flexibility: different types of and means of providing flexibility.
- Manufacturing Strategy Content: Strategic issues and operations regarding capacity, facilities, process vertical integration, quality, organization, and control systems, expecially manufacturing planning and control systems.
- International manufacturing networks
- Performance Measurement: Productivity. Different types of measures for feedback to different planning and control levels.
- Supply Chains
- Sustainability related to long term planning of manufacturing
- Development of services in relation to manufacturing strategy

Teaching and working methods

The teaching is organized in lectures and seminars. The lectures cover theory and approaches. The seminars are used for guidance and other group exercises such as project presentations.

Examination

PRA3	Project	4 credits	U, 3, 4, 5
MUN1	Oral examination	2 credits	U, 3, 4, 5

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses:
Production Logistics. Analysing and Improving Manufacturing Operations.

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Fredrik Persson

Examiner

Veronica Lindström

Education components

Preliminary scheduled hours: 28 h
Recommended self-study hours: 132 h

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.