

Project Course Advanced - Industrial Manufacturing

Programme course

12 credits

Projektkurs avancerad - Industriell produktion

TMPI03

Valid from: 2017 Spring semester

Determined by

Board of Studies for Mechanical
Engineering and Design

Date determined

2017-01-25

Main field of study

Industrial Engineering and Management

Course level

Second cycle

Advancement level

A1X

Course offered for

- 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

Production economics and at least two of the courses; Production logistics, Advanced planning and scheduling, and Analysing and Improving Manufacturing Operations.

Intended learning outcomes

The course aims to impart knowledge and skills and to develop students' capacity for implementation of production management. Students will solve, in project form, real production management problems in different kinds of businesses. On completion of the course the student will have achieved the following learning objectives:

- Knowledge about research methods in production management.
- Be able to identify, select and apply theory and knowledge areas based on specific problems.
- Be able to identify, select and apply theory and investigation tools in a real problem.
- Mastery of written and oral communication of the results of the project work during various phases of the project.
- Obtain experience in planning and implementing projects in the group.
- Critical review of own and others' work.

Course content

Research methods in production management, such as in a structured way break down and clarify a problem, to analyze and draw conclusions on a substantiated way. Data collection, interviews, surveys, and data capture. Report-writing methodology, presentation and opposition

Teaching and working methods

A small number of lectures and/or seminars give grounds in methodical investigations and analysis, suitable to be applied in production management. The students are divided into smaller groups. These groups are working on a major project with a company specific task. Each project is assigned a supervisor from the Department. The course runs throughout the whole fall semester. Theory seminars are used to disseminate knowledge about the theory that may be needed within the framework of the course. Part of the seminar is in preparation for the presentation of the contents of the others in the course. The second part is the active participation of theory workshops.

Examination

PRA ₂	Project work including oral and written assignments.....	6 credits	U, 3, 4, 5
PRA ₁	Project work including halftime examination	6 credits	U, G

The project report is the main examination dossier. Report assesses from main criteria logic/red wire and credibility, which includes:

- The problem is clearly presented and problematized and specific issues are clearly justified.
- The theoretical framework is motivated, presented and applied in a relevant way.
- The methods and approaches are justified and can be considered as appropriate and applied appropriately.
- That the conclusions can be judged as credible and is a logical consequence of the work presented.

Grades

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

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Fredrik Persson

Examiner

Fredrik Persson

Course website and other links

Education components

Preliminary scheduled hours: 96 h

Recommended self-study hours: 224 h

Course literature

Specifik litteratur kopplad till respektive projekt.

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://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.