Quality Management - Project Course

Programme course

12 credits

Kvalitetsutveckling - projektkurs

TMQU27

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
- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Industrial Engineering and Management, Master's programme

Specific information
Exchange students may apply for the course after arrival to the university but before it starts. The international officer for exchange studies must be contacted before applying.

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
At least two of the following courses: Lean production, Customer Focused Product and Service Development, Statistical Quality Control, Six Sigma Quality.
For Six Sigma projects, having passed the course Six Sigma Quality is a definite requirement.

Intended learning outcomes

General project
The aim of this project course is to give the participants in-depth practical understanding and experience of quality management as regards product, process and business development. By applying previous knowledge in structured and methodical way students carry out improvement projects in case organizations. After completing the course the student should have:

- learned to plan and carry out an improvement project related to Quality Management
- learned to identify, collect and analyze data, which is necessary to carry out a project
- gained practical experience on quality management in an organization
- gained theoretical and practical knowledge about how to effectively manage change and improvement projects
- gained experience about working on a joint project in team
- gained experience about written and oral presentation

Six Sigma project (additional information)
The aim of conducting a Six Sigma project at an external organization is to solve a recurring problem using the DMAIC methodology as taught in the course TMQU04 Six Sigma Quality. A completed project will lead to a Six Sigma Green Belt certification.

Course content

In this course it is possible to conduct different types of Quality Management projects, e.g. Six Sigma projects. To conduct a Six Sigma project at a company it is required that the student has completed the course TMQU04 Six Sigma Quality. To conduct another project the student has to fulfill the prerequisites stated.

Teaching and working methods

The course implies analysing a quality problem and providing solutions to it. The project is carried out with supervision from the course responsible and a close cooperation with a company. The course extends over two study periods. The work is carried out in groups of 2-3 people and involves a number of whole-day visits to a company. As part of the project also includes to search for and use scientific literature. The work concludes with the presentation of a written report.

Examination

PRA2	Project Work	12 credits	U, 3, 4, 5

The project report and how the project is carried out are reviewed and graded by the teacher according to U,3,4,5.
Six Sigma projects are graded in each DMAIC phase with U,3,4,5 based on how well the work was done by the group and how much supervision and completion they have needed. The group score is then the average rating of the five phases.

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

Department
Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent
Björn Oskarsson

Examiner
Peter Cronemyr

Education components
Preliminary scheduled hours: 40 h
Recommended self-study hours: 280 h

Course literature
Utdelade artiklar. Böcker från tidigare kurser.

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.