EH2030 Business Development and Quality Management 7.5 credits

Verksamhetsutveckling och kvalitet

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

Establishment

The official course syllabus is valid from autumn semester 2025 according to the decision of Director of First and Second Cycle Education: HS-2025-0554.Date of decision: 2025-04-07

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

Knowledge in a related field of technology corresponding to at least 45 credits of completed courses

in the field of engineering, which is normally achieved by students who have completed all technical

courses in the first two years of an engineering programme or

Bachelor programmes with a technical focus.

Language of instruction

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

Intended learning outcomes

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

1. apply Lean and Six Sigma methods to improve quality processes within an organisation

2. analyse the impact of quality management practices on an organisation's performance

3. design process improvement plans using statistical tools and data-driven decision-making methods

4. evaluate the financial implications of implementing a quality improvement initiative

5. work together in small teams to implement quality management projects

6. critically review contemporary theories in quality management and propose adaptations to new challenges in business environments.

Course contents

– Quality and Total Quality Management (TQM) and their importance for business development and profitability.

– Process orientation and management of activities through statistical methods and their analysis.

– Managing variation and ensuring quality in product and service development.

– Quality assurance in purchasing and supplier selection.

– Continuous improvement and application of the Six Sigma method.

– The role of people in quality work and quality-driven leadership.

– Implementation and use of management systems such as ISO 9000.

Examination

- SEM1 - Lecture, 1.5 credits, grading scale: P, F
- INL1 - Assignment, 3.0 credits, grading scale: P, F

- INL2 - Assignment, 3.0 credits, grading scale: P, 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

Approved assignments (INL1 + 2; 6p) and 80% attendance at lectures (SEM1; 1.5p).

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.