

ML1608 Maintenance Economy for Sustainable Production 6.0 credits

Produktionsekonomi för hållbarhet

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

Establishment

Course syllabus for ML1608 valid from Autumn 2018

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Specific entry requirements: The courses ML1600 and ML1000, or the equivalent. Expected prior knowledge: Knowledge equivalent to the course ML1605.

Language of instruction

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

Intended learning outcomes

Upon completion of the course, the student should be able to:

- perform a profit analysis and calculate brake even, contribution margin and safety margin
- set up and carry out a traditional cost-price calculation with flat-rate overhead costs
- set up and solve a capital budget by means of pay-back and net present value with special focus on industrial maintenance
- account for balances covering both economic, social and environmental considerations that may be required in industrial production and maintenance
- describe Life Cycle Assessment (LCA) as a method and argue for when it is appropriate to use
- account for rules and regulations governing the execution of accounting
- evaluate and communicate different arguments around a business case on environmental, social and economic aspects related to industrial production and maintenance
- explain how sustainability aspects in industrial production relate to the business activities of industrial companies
- demonstrate the ability to work in project form

Course contents

- Results and liquidity, product and capital budgetings, as well as profitability calculations, accounting principles
- Industrial sustainable development and the relationship between economic, social and environmental aspects
- Sustainability regulations, sustainability accounting and stakeholder involvement
- Life cycle assessment (LCA)
- Negotiation technique
- Written communication in the form of project reporting

Course literature

Meddelas tio veckor före kursstart

Examination

- PROA Project Work, 1.5 credits, grading scale: P, F
- ÖVNA Assignments, 1.5 credits, grading scale: P, F
- TENA Written examination, 3.0 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.

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.