ML1613 Maintenance Management, Specialised Course 7.5 credits

Underhållsteknik, fortsättningskurs

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

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for ML1613 valid from Spring 2020

Grading scale

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

Education cycle

First cycle

Main field of study

Electrical Engineering,Technology

Specific prerequisites

Completed courses ML1604, ML1605 and ML1608 or the equivalent

Language of instruction

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

Intended learning outcomes

On completion of the course, the student should be able to:
- design development short-term and long-term plans for a maintenance organisation, as well as formulate key performance indicators and maintenance targets
- plan and schedule maintenance work for industrial systems
- analyse cost efficiency of different alternatives for technical maintenance
- account for the influence of the technical maintenance work on the economy of an industrial enterprise
- demonstrate skills in practical use of life-cycle analysis (both Life Cycle Assessment LCA, Life Cycle Cost LCC and Life Cycle Profit LCP) in industrial production
- discuss and analyse problems connected to introduction of TPM (operator maintenance, specialist maintenance, improvement work) in industrial production
- use modelling and simulation for the analysis of effects of changes in an existing industrial production activity
- analyse the competence need in an industrial maintenance organisation
- account for the use of various IT systems for technical maintenance.

Course contents

- maintenance management
- preparation of maintenance work
- fail safety analysis
- economic analysis,
- TPM
- IT-systems

Examination

- INLA - Assignment, 1.0 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Laboratory Work, 2.0 credits, grading scale: P, F
- PROA - Project Work, 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.

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.