



MG219V Maintenance Management 12.0 credits

Maintenance Management

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

Establishment

Course syllabus for MG219V valid from Spring 2012

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

- Minimum 120 university credits (Swedish university points, hp) and
 - English B
- or equivalent

Language of instruction

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

Intended learning outcomes

After completing the course requirements, each student should:

- be able to use of contemporary maintenance management practices
- be competent to manage and develop the maintenance activities in a modern enterprise
- be able to perform maintenance activities in a cost effective manner

Course contents

Management and Organization: This course module treats the contemporary managerial (organizational and economical) topics in maintenance activities. The curriculum covers also the maintenance activities in the development and procurement of new production equipment, translation of production requirements into maintenance objectives, and how to achieve the objectives with optimized resources. Also covered is how the maintenance experience can be used during the design phase, and how to define the future maintenance needs of a company. European standards within maintenance are discussed, as well as laws and regulations regarding labor, liability, warranties, environment, energy, etc.

Reliability performance of production plants: This course module covers knowledge about how to guide, control and develop the availability performance activities, in order to assure the performance of the production, the quality of the products, the safety regulations and the environment conditions. After studying this module, the student will have good knowledge of all the availability performance activities that shall be taken into account during the entire life cycle of the production system.

Maintenance methods and techniques: This part of the course covers definition and development of the maintenance work plan. The theories and methods that are used to optimize the mix between corrective maintenance, preventive maintenance, strategies, and modifications are discussed – how to choose the right methods for the best cost effectiveness.

Maintenance information systems: This part covers the different methods and systems used in the decision making process, how to assure that the maintenance activities are cost effective, and are supporting the company profit. Further, the means how to specify the system requirements and how to develop and use the information systems for planning, control, feedback analysis and improvements are discussed.

Disposition

E-learning course. The course is taught in English.

Course literature

Literature: Allan Wilson Asset Maintenance Management; Industrial Press, 2002

Lecture notes, E-learning documentation.

Equipment

Computer with Internet access.

Examination

- INL1 - Assignment, 1.5 credits, grading scale: P, F
- INL2 - Assignment, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- INL3 - Assignment, 1.5 credits, grading scale: P, F
- INL4 - Assignment, 1.5 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

Homework assignments (INL1, INL2, INL3, INL4)

Written examination (TEN1)

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.