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 Autumn 2007

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) apart from completed upper sconday education incl document proficiency in English is required.

Language of instruction

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

Intended learning outcomes

The course emphasizes the management issues in the maintenance organization, but at the same time also importance of reliability in understanding of the mechanisms leading to failures in manufacturing equipment, and the state-of-the-art preventive and proactive maintenance methods. The course covers also basic maintenance techniques and methods, and life cycle perspective on equipment.The course content is divided into four modules – reliability performance of production plants, maintenance methods and techniques, maintenance information systems, and management and organization.

Course contents

To become competent to manage and develop the maintenance activities in a modern enterprise and to run them cost effectively requires broad knowledge from several areas, and understanding of specifics of the maintenance operations. This course provides both the theoretical knowledge as well as extensive training on case studies. The following is a list of topics to be covered: **Management and Organisation**

This course module treats the contemporary managerial (organisational 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 functional requirements (e g equipment dependability) and into quantitative and qualitative maintenance requirements (e g reliability and maintainability) and how to optimize the 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. Actual European standards within maintenance are discussed. As well as laws and regulations regarding labour, liability, guarantee 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.

Disposition

1-2 occations. The course is taught in English.

Course literature

Lecture notes, Jan Frånlund “The Maintenance Management Tutorial”E-learning documentation.

Equipment

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.

Examination, assignments.

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.