



MG219V Maintenance Management 12,0 hp

Maintenance Management

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

Fastställande

Kursplan för MG219V gäller från och med HT07

Betygsskala

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

Utbildningsnivå

Avancerad nivå

Huvudområden

Särskild behörighet

Eligibility/admissions requirements: Minimum 120 university credits (Swedish university points) apart from completed upper secondary education incl document proficiency in English is required.

Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

Lärandemål

Course goals: 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.

Kursinnehåll

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.

Kursupplägg

Disposition: 1-2 occasions. The course is taught in English.

Kurslitteratur

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

Utrustning

Required equipment: Internet access.

Examination

- INL1 - Assignment, 1,5 hp, betygsskala: P, F
- INL2 - Assignment, 1,5 hp, betygsskala: P, F
- INL3 - Assignment, 1,5 hp, betygsskala: P, F
- INL4 - Assignment, 1,5 hp, betygsskala: P, F
- TEN1 - Examination, 6,0 hp, betygsskala: A, B, C, D, E, FX, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

Examinations: Examination, assignments/Tentamen och inlämningsuppgifter.

Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.