Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1SE015 Tillståndsövervakningssystem I, 7,5 högskolepoäng
Asset health management I, 7.5 credits

Main field of study
Total Quality Maintenance

Subject Group
Industrial Engineering and Management

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by Organisational Committee 2009-11-16

The course syllabus is valid from autumn semester 2010

Prerequisites
Basic eligibility and knowledge corresponding to Industrial measurement and failure analysis 7,5 hec (SE9011), Engineering economics 7,5 hec (JE9041), Quality management 7,5hec (SE9012) and Computational methods for technical application 7,5 hec (MA1081), or the equivalent.

Expected learning outcomes
After completing the course the student is expected to be able to

- account for technologies and methods used in conditionmonitoring
- understand the technical and economical effects of condition-monitoring on machinery and production processes
- understand the role of condition-monitoring in maintenance and production planning, in-service training and working environment and also in the profitability of

the company

Content
The course comprises the following elements:

- Methods used in condition monitoring
- Measurement and analysis methods
- Impact of condition monitoring on production, quality, man and environment

Type of Instruction
The teaching consists of lectures, group work, seminars, laboratory work, assignments and a case study.

Examination
The course is assessed with the grades U,3,4 or 5.
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The examination is based on submitted reports and oral or written presentation of compulsory assignments.

Course Evaluation
A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

Credit Overlap
Overlaps fully with Condition monitoring - production, man and environment SEC927 and to about 5 hp with Condition monitoring technology SE9973 (SEC917).

Other
Some elements in the course may entail costs defrayed by the course participant.

The course language is English if international students attend the course.

Required Reading and Additional Study Material
Required reading
TD, *Failure analysis and maintenance technology*. App. 100 pages.

Current scientific articles

Reference Literature
Barron, R., *Engineering Condition Monitoring, practice, methods and applications*, Addison Wesley Longman, 1996.

Block, H. P., Geitner, F. K.; *Machinery failure analysis and troubleshooting*, Golf publishing Company, Huston, 1994.