



Course syllabus

Faculty Board of Science and Engineering
School of Engineering

2MT017 Projektarbete 2, 7,5 högskolepoäng
Project Work 2, 7.5 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Organisational Committee 2009-07-24

The course syllabus is valid from spring semester 2010

Prerequisites

Engineering Mathematics 22,5 ECTS, Physics (Mechanics) 7,5 ECTS, Mechanical Engineering Basics, 7,5 ECTS, Machine Design M1, 7,5 ECTS, Advanced CAD in 3D, 7,5 ECTS, Strength of Materials, 7,5 ECTS and Machine Design M2 7,5 ECTS.

Expected learning outcomes

After completing the course the students are expected to have acquired

- Basic knowledge in mechanical breakdowns and failures
- Basic knowledge about the tool FMECA Failure Mode Effect and Critical Analyses
- Ability to apply of the knowledge and tool mentioned above i real products

Content

The course comprises the following elements:

- Failure theories for machine elements and machine parts
- Influence of friction on contact surfaces in the machine elements and machine parts
- Basics of the tool FMECA Failure Mode Effect and Critical Analyses
- Project based on the contents of the course

Type of Instruction

The teaching consists of lectures, exercises, and project work. Some elements are compulsory. Information on the compulsory elements will be given at the start of the

course.

Examination

The course is assessed with the grades U,3,4 or 5.

The assessment of student performances usually takes place during special examination periods and may take the form of project work, submitted assignments and written exams. The examination may be written and oral

Course Evaluation

When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

Other

The course will be given in english if there will be international students.

Required Reading and Additional Study Material

Required reading

Van Beek, Anton. Advanced engineering design, lifetime performance and reliability (2009). TU Delft. www.engineering-abc.com. bout 400 pages (of 520)

Hadout copies