



## Course Analysis MF2019

### 3D Modeling and Visualization HT19

2020-02-25 by Kjell Andersson

#### 1 Course information

This course supports virtual prototyping. Designers and engineers need a common understanding of the performance aspects of the design before physical prototyping. In this course students create 3D CAD-models which support efficient cooperation between individuals and groups of individuals with different types of competence. The models can be used with different purposes, for example eliminating interferences between parts as the mechanism moves through the real operating range, or generating operating loads in order to check the design criteria's using Finite Element Analysis.

**Course responsible teacher:**

Kjell Andersson

**Other teachers in the course:**

**Examiner:**

Kjell Andersson

**Learning activities:**

Lectures, Computer exercises, home assignment and a project task.

**Additional Comments**

Individual project tasks suggested by the students.

#### 2 Students' view of the course

*Summary of students' view of the course based on for example LEQ survey and/or interviews or other activities.*

**Response rate of LEQ course evaluation survey:**

17 %

**Brief summary of students' responses from the LEQ survey and/or other types of course evaluation:**

In the survey the students gives it high rating in meaningfulness (Q1-6) as well as for the comprehensibility (cognitive) level (Q7-11). On the manageable level (Q17-22) students also had a high rating except the question that dealt with learning by collaborating with others which was lower rated than the others.

**Additional Comments**

We have to take into consideration the response rate was only 17%.

**3 Teacher analysis of the course**

**Changes of the course before this course offering:**

The order the content was presented at the lectures and the order of the home assignments was changed since last course round.

**The course's strengths** (based on the students' experiences and the teacher analysis):

The main strength is that the students are very free how to perform the course work in terms of home assignments. They can use their own laptops and work at home with the assignments and come to the exercises and get support with specific problems they face. Another strength is that the course offers a lot of self-paced tutorials and videos that can be used to learn the CAD modeling tool.

**Areas for improvement of the course** (based on student experiences and teacher analysis):

To use more live demonstrations on the lectures instead of powerpoint slides.

**Proposed changes to the next course round:**

More live demos of modeling features of the CAD tool.

**Additional Comments**

None