Course Analysis MF220X and MF230X

Degree Project in Innovation Management and Product Development, Second Cycle 30.0 credits
Spring and autumn term 2021

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1   Course information

Course responsible teacher:

Jenny Janhager Stier

Other teachers in the course:

Supervisors: Johan Arekrans, Jennie Björk, Jens Hemphälä, Rafael Laurenti, Mats Magnusson, Susanne Nilsson, Sofia Ritzén, Jenny Janhager Stier

Examiner:

Sofia Ritzén

Learning activities:

The studies for a five-year engineering degree (course MF220X) and two-year master's degree (course MF230X) are completed by a degree project in which the student is expected to demonstrate ability to independently solve an engineering assignment by using a broad spectrum of skills.

The subject for the degree project can vary but it should relate to technology or technical development and have a clear contribution to product development or innovation.

Provided that the degree project satisfies the above requirements and provided that qualified supervision is available during the degree project, the student can choose to carry out the degree project either at an academic department or in industry.

Four compulsory components are included in the degree project, i.e. the technology student should:

1. Be present at, at least two presentations of other master's degree projects, before review/opposition and final presentation. Attendance at final presentations of degree projects, completed by students of other master programmes, may be included.

2. Be present and review at a planning seminar where problem definitions are discussed, together with method choices and the definition of the theoretical framework.

3. Review and be opponent at the presentation of another master's degree project.

4. Carry out and submit an approved master's degree project, as well as present it at a public seminar.

The Degree Project and the critical review should be carried out by one or two students.

2   Students' view of the course

Response rate of LEQ course evaluation survey:

9 %   (questionnaire sent out from Canvas).

The analysis is also based on discussions with and oral feedback from the students.

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

The few students who responded to the questionnaire seemed satisfied with the course information, the course manual, the assignment, the supervisor, and the application of the course. One student wished the supervisor had had more time. One student also requested more seminars together with other students in the course.

3   Teacher analysis of the course

Changes of the course before this course offering:

Prior to this course, the following changes have been made:
- a simplification of the registration process, which made it faster for the students to be registered for the course and thus receive study grants on time, etc.

- changes and supplements to Canvas, e.g. supplemented with a process description and figure for the last phase of the degree project work.

- refinements of the adjustments that needed to be made last year due to Covid-19.

The course's strengths

Interesting and educational projects, competent supervisors, and clear information.

Areas for improvement of the course

Regarding the suggestion of more seminars might be an effect of the "Corona situation". Covid-19 has meant that many students worked on their projects at home by themselves instead of at the companies/organizations or KTH. This has been a more isolated and exposed situation, which is probably a reason why a need to meet other students has arisen. Hopefully, we do not have the same situation during the next course round. Including more seminars has been discussed in the teaching group and also touched upon with some of the students. However, there is a complexity around this because some students have declined such proposals due to the projects containing sensitive (confidential) information and questions. An idea could be to offer voluntary seminars for students who wish to receive further feedback from other students. Also, from supervisors' perspective it is important to make sure this course more than others train the students in autonomously managing their projects and learning process, why we should be restrictive in adding teacher managed activities.

Proposed changes to the next course round:

The reason for the low response rate is probably due to the fact that this is the last course in the students' education and that they have left KTH (mentally) when the questionnaire is sent out. Next year, I will capture their views earlier.

Both students and teachers have found an advantage in being able to carry out both the planning seminar, the final seminar, the opposition, and the auscultations digitally. Many students are in other places and in other countries during the degree project period. It will also be easier to find times when supervisors and industry supervisors can participate. In addition, it will be much easier for others such as family members, friends, company representatives, etc. to listen to the final seminar. We will probably keep the digital seminars even though the Corona restrictions have been lifted.

Two concrete changes for next year:
- It will be mandatory for opponents to use a PowerPoint presentation or equivalent when they oppose. It is observed that the opposition becomes much stronger when a PPT is used. Important comments and questions are not forgotten during the opposition, and it becomes clearer to the audience what is being discussed.

- As these courses (MF220X and MF230X) do not fully follow MMK's course manual, the handbook will be revised slightly and adapted to the courses MF220X and MF230X.