# Report - II1306 - 2022-10-26

Respondents: 1 Answer Count: 1 Answer Frequency: 100.00%

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail):

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## DESCRIPTION OF THE COURSE EVALUATION PROCESS

Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

This is an evaluation for both course rounds, i.e. for CINTE and TCOMK

As the core of the course is a project we have had several meetings with the student project groups during which students also have been asked questions and have been encouraged to give feedback. individual feedback by LEQ.

## DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

There has been three meetings with each student group where the progress in their projects have been assessed at which they also have been invited to share their thoughts about the projects and the course as such. A final meeting at the end of the course was also held when the students met to compete with their robot designs.

### **COURSE DESIGN**

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The course has had two individual quizzes on basic reference management and basic project planning. The students have worked in groups to come up with a small project plan, they have built and programmed a LEGO SUMO robot and measured their designs at a competition against the other groups (bot from CINTE and TCOMK)

## THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?

We have measured the students estimate of the time they thought they would need when the problem was introduced against what they actually spent at the group meetings. Thus 100% of the students have answered to this (in contrast to the 16% that answered the LEQ) and what we saw that the initial estimates typically fell between 24 and 80h while the actual outcome was 16-24h for the robot project and the remainder used for quizzes, presentations and the competition.

#### THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

This is one of few tears where all students have been able to answer questions on how the robot has been built and programmed without problems. The few studenst that have not compleyted the course have either dropped out from their program or failed to attend presentations.

#### STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

See below

SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

It is hard to draw any far reaching conclusions on the LEQ as so few students have answered it. What one can say about it is that the students have very varying backgrounds when entering the course. Some students have vast experience in programming, have worked in projects, some have built this type of robots before and some have had previous experience of studying at university. For these students the assignments have not been very challenging. But for students which have had no relevant previous experience the assignments have been tougher at least at the outset (this is intentional - the course should fit novices and the assignments should appear as more complex than they really are as an important learning objective is to give students tools for planning their own studies at KTH and have them experience that what may appear as hard from the beginning need not be that hard as long as one starts working on it (learn to avoid procrastination))

## OVERALL IMPRESSION

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

From what I have seen and heard a majority of the students seem to be satisfied which is the feedback one would hope for.

#### ANALYSIS

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between: - students identifying as female and male?

- international and national students?

- students with or without disabilities

See above SUMMARY OF STUDENT'S OPINIONS

## PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?

This year we had guidance by communication in Canvas and sessions by ZOOM - for next year we probably should add physical guidance sessions also as some students apparently were not familiar with such sessions.

Some elements of very basic principles for scientific work should be added such as to strive for simplicity (cp. Occam's razor), the concept of falsifiablity (Karl Popper) as means of finding good solutions to problems.

A better method for individual course assessment has to be devised which should yield a higher frequency of answers.

OTHER INFORMATION
Is there anything else you would like to add?
I think it would be simple to transfer the LEQ into Canvas as a Quiz with the potential of making it mandatory