

Course analysis for EL2450 Hybrid and Embedded Control Systems

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Course information: <https://www.kth.se/social/course/EL2450/>

1 Teaching stuff

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2 Quantitative data on number of students

As can be seen from the course information webpage, the course is worth 7,5 credits. 5,5 credits are given for a passing grade in the exam (A,B,C,D,E,Fx,F scale) and 0,5 credits for each of the two first homework and 1 credit for the third homework (laboratory exercise)(P/F scale). The statistics are as follows:

Number of registered students: 78

Number of students that passed the course (exam and homework): 60* (*incl. students that passed the re-exam and previous years' students)

3 Student viewpoints

Feedback from the students was gathered in the form of a final evaluation through an anonymous evaluation questionnaire we designed in Google. The results of the latter are attached. We received feedback from 20 students out of 78 registered. The main difference from last year is that this year's lectures and exercise sessions were on site.

According to the results from the questionnaire, we can draw some overall conclusions. In general, the lectures, exercises and also the homework assignments all received a lot of positive comments from the students. Of course, nothing is perfect and different students have different expectations from the course, we can also find some constructive suggestions for the course which are important for our future improvements. Lots of the students found the course useful and interesting although some students found the lectures or the exercise sessions hard to follow. The students praised again how the lectures were complemented by the exercises and homework assignments to help them understand the contents better. Although the exercise sessions help the students better understanding the course contents, much more clear and neat notes on the whiteboard by the teaching assistants are expected. Although the experimental assignment of homework 3 was again popular among the students, some students felt it was very time consuming to debug with the online simulator and some suggested to update the code. They also suggested to update the last assignment for more clear instructions. A few commented that the assignments were quite repetitive, they want more variation and challenges from the homework assignments. Several students also complained that they cannot distribute the workload among the group members of the group assignments equally.

Regarding the lectures, lots of students mentioned that the topics are interesting and useful, some appreciated the given recorded lectures as well since they can go through the lectures again. On the other hand, several students prefer more whiteboard calculations to follow the pace of the lectures and also to keep notes. Some students felt that the notations are heavy to follow. We have incorporated more examples as the course proceeded to help them understand these notations. Some students also suggested to improve the schedule, e.g., some

gap between two lectures and some gap between the lecture and the related exercise session for the preparations.

Regarding the reading material, most students are positive. They are quite happy with the recorded lectures and exercise sessions. Some students want extra material regarding prerequisite knowledge since they find the first 3 lectures and exercise sessions hard to follow due to lack of background knowledge.

4 Planned developments

The main requirement from the students is that they prefer more whiteboard calculations. In this aspect, we will offer more detailed calculations or proofs on the whiteboard when needed. In addition, the slides are going to be updated with more examples. Similarly, for the exercise sessions, our teaching assistants will try their best to make the notes more clear and easy to follow.

5 Other comments

As mentioned in our discussions, some students have suggestions for the schedule of the course. This will be taken into account in potential changes to the course schedule in the coming years.