# Course analysis for EL2450 Hybrid and Embedded Control Systems

#### Spring 2023

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

#### **1** Teaching staff

Dimos Dimarogonas, lecturer, examiner and course responsible Victor Molnö, teaching assistant Adrian Wiltz, teaching assistant

## 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: 63

Number of students that passed the course (exam and homework): 48\* (\*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 9 students out of 63 registered.

According to the results from the questionnaire, we can draw some overall conclusions. In general, the lectures, exercises and also the homework assignments were very-well perceived. 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. Students positively pointed out the approach of the lecture to interconnect theory of hybrid systems and its application with each other. While the lecture was perceived by some students as theory-loaded, the exercise sessions were perceived as helpful and allowed to obtain a deeper understanding of the course material and its applications. Throughout the course, there was much interaction with students and TAs. The opportunity to discuss course material, exercises and homework were vividly used after each of the exercise sessions. We also received throughout the course feedback that we could partly directly incorporate. Such was to make the exercise sessions more interactive. Also based on feedback and our observations, we revised the homework assignment. As we received little negative feedback at the end of the course, we think that changes incorporated throughout the course and changes compared to the previous year had a positive impact. The most significant change was to introduce a gap between a lecture and the related exercise session to give time for preparations. One student also recommended to future students in this course to use this preparation time to be able to better interact with lecturer and TAs during the course. Also the well-structured derivations during the lectures were pointed out.

## 4 Planned developments

We will further expand the opportunities for interaction between students and TAs during the exercise session. Changes in homework assignments will be evaluated in the next year and correspondingly further adjusted. Besides, the continuous further development of existing material shall be continued.

# **5** Other comments

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