

Course analysis IE1206 Embedded Electronics

The course analysis is based on the LEQ, interview with 2 student and discussions with teachers Saul Rodriguez Duenas, Bengt Molin, Panagiotis Chaourani and the examiner Carl-Mikael Zetterling.

Summary from 2018

From the course analysis 2018 I identified:

- The learning outcomes should be updated with emphasis on what skills are required.
- The Arduino project work and student competition work well and it was appreciated by the students.
- No changes of the course activities should be implemented for 2019.

2019 edition

The learning outcomes was updated in the course plan before the course was given.

The LEQ was answered by 23 students (16 %). According to the students they about 10-20 hours per week and though the study pace was good. The average response in the LEQ was above 5.0 except for "I had opportunities to influence the course activities" which had 4.0. This year the answer to "Understanding of key concepts had a high priority" received 6.4 which is encouraging. From the students answers it was not possible to clearly identify if any activity that should be improved.

From interviewing the students, they seem to study in the pace needed and the student recitations is a key activity for them to keep up and learn the subject in the course. Time on task seems ok. The two students that were interviewed thought the labs were straightforward and good. I got the impression they thought that they were quite easy. One of the student liked the Arduino project a lot and emphasized that it was a pleasure to do the project by themselves with very little guidance. During the course some students express that they wanted to get more time to discuss with the teacher during the course.

Discussing among the teachers we identified that student recitations and labs worked well. We thought that in the Arduino project more students than last year design quite simple circuits, that passed the formal requirements but not more. Some students also choose circuit ideas with little connection to the subject taught in the course. If we can find a way of increasing the level for passing and guide students closer to the taught subject it would be good. We need however to come up with some way that doesn't restricts the students in what they want to design.

The throughput was 67 % after the re-exam in August. This is a bit on the low side and we should try to identify what can be improved in the activities to improve that.

Suggested changes for 2020 edition

- Find a way to let student get more time to discuss with teacher.
- Find a way to raise the requirement for pass in the Arduino project and possibly guide students more to the content in the course.