# Protocol of evaluation meeting regarding course EG2110 Power System Stability and Control at KTH, Electric Power and Energy Systems 2024-03-19

The course evaluation consisted of one meeting that took place in person at KTH (2024-03-19) after the oral examination had taken place. The students/members of the evaluation committee were asked to give their comments on the general impression of the course, the course material, lecture and TA sessions, and the examination. The students were also asked if they had any additional feedback or recommendations on how the course could be improved in the future. During the meeting the students gave valuable feedback and comments that were discussed with the course responsible and one of the teaching assistants of the course. The summary of the meeting was broken down into the following areas:

# **General impressions:**

- The general impression of the course is that it is a very interesting course, and it gives good insights of real world applications. The students agreed that the lectures and the content of the course are very good. However, the required workload is the main drawback.
- The students were very interested in the area, even for considering working in this topic in the future.

### Course workload:

- One student considered that the assignments are designed correctly and they are very helpful to
  understand the course content. However, they are also very time-consuming. Therefore, it is difficult to
  combine the duties of these work with the rest of courses of the same period, or with the PhD project in
  case of PhD students.
- Regarding the reasons why is so time-consuming, students mentioned the time debugging the code and writing the reports. One student suggested simplifying the report. It was also considered to maybe give more importance to the oral presentation, or dividing the longest assignment, D2, into two parts.
- The deadline of the assignments should end before the lectures of the new topic starts. Some students missed the lectures to try to have the assignments done. However, if this is done, the assignments have to be simplified further (as with the current assignments it is considered that the deadline are quite tight).

## TA sessions:

- The students considered the TA sessions very useful.
- Some of the sessions were a bit overloaded. Students suggested to include a simple queuing system in the blackboard to make the order of questions more fair, as well as the possibility to send small doubts by email (with the option by the TAs of referring to the Project Working Hours if they consider a longer explanation is required).

# Grading of assignments:

- The students considered the grading a bit too harsh. Especially the loss of points in simulations questions when the theoretical part was wrong, as well as small points deductions due to smaller errors. The small errors are especially concerning in part 2, as a small deduction can make your grade go one level down.
- The student considered that the feedback from the wrong answers could be improved, to understand better what the reason of the wrong answers was.
- It was not clear enough what to include and focus on the Oral Presentation.
- One student provided a list of clarifications to improve the instructions of the assignments and oral presentation. The explanations given by the examiner about the assignments were correct, but it is important to have the written instructions as clear as possible.

# **Course prerequisites:**

• The students considered that the code for the load flow in the first assignment, D1, should be provided or some kind of interface that would provide you with the answers of that part. The main reason for this is the unbalance in workload between the students that took the course Power System Analysis at KTH and the ones that did not.

### Other comments:

- It was suggested a separation of the course between masters and PhD students, to adapt better to the needs of PhD students.
- One student suggested the use of other software more used in industry, such as Python, instead of Matlab. Another student replied that he thinks is a good idea, but most student probably come with a background of knowing Matlab.
- One student suggested that answers for specific B-numbers are provided also for assignment D3.

### **Conclusion:**

Overall, the students found the course very interesting. However, it was very time consuming, making it difficult to combine it with other duties in the same period. The tasks that took most of the time was debugging code and writing the report. They considered it is difficult to improve the debugging part, but it could be quite useful that the load flow calculation code is provided to students to minimize problems in the first assignment of the course, D1. It was also suggested to divide D2 into two parts. Regarding the report writing, the report could be simplified to avoid spending so much time in the report. The TA sessions were very useful for students. However, the slight overload in some of the session may have caused the students spend more time debugging by themselves. The students considered the grading system a bit too harsh, although they appreciate the possibility to resubmit in F and Fx assignments. They also considered that the instructions of the assignments and oral presentations are generally clear, but some improvements can be made, as there was some misunderstandings that caused point reductions to some students.