

Protocol of evaluation meeting regarding course EG2110 Power System Stability and Control At KTH, Electric Power and Energy Systems 2021-03-19

The course evaluation consisted of one meeting that took place virtually over Zoom (2021-03-19) 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 examiner and the course responsible. The summary of the meeting was broken down into the following areas:

General Impression:

The students both said that the course was very enjoyable and interesting, expressing that they learned a lot. Some of their main points of focus were as follows below:

- The rigor of the course and some of the associated factors:
 - The course was very time consuming and demanding. It was estimated that they spent 40-50 hours weekly on the course.
 - One student said that it was a bit more work than other 7.5 credit hour courses they had taken. However, some of this may have been due to the online format of the course.
 - One student pointed out that perhaps your prior power systems knowledge would factor greatly into how much time was spent on the course.
- The structure and organization of the course:
 - The course was very well structured and organized, which made it easy to follow.
 - One student suggested that it would be better if the course was distributed over two periods, to lessen the time burden on students.
 - Another thought that it was fine over one period but if some of the assignments were completed as presentations rather than report writing. They pointed out that report writing was very time consuming, although it was very useful.

Oral Examination:

- Only one of the students in the feedback session had an oral presentation. They felt that it was the highlight of the course. It was very interesting and they also learned a lot. Preparing for the presentation served as a refresher from some of the course material that was learned early on in the course. They learned as well through the discussion between the students, the TA and the professor. It was also a good practice before the presentation of their Master's thesis.

Projects:

- The reports were very well constructed.
- One student suggested it would be beneficial to have partner projects to encourage collaboration between students. This way students would be able to benefit and learn from one another.
- Both students thought that the report writing of the projects was extremely time consuming. Particularly writing the equations and matrices needed for the project answers. If this workload could somehow be reduced, it would reduce the overall time burden of the course.
- The report writing is an important component of this course. It was suggested therefore that D2 could be given as a presentation instead of the report format. Then D1, D3 and D4 would remain in their written report formats. The students thought that this was a good idea, considering that D2 is such a long report this could save a lot of time as well as would give the opportunity for two presentations, including the oral examination.

Lectures and TA Sessions:

- The TA sessions and Lectures were quite good, despite the online format. It was suggested when given a choice, a hybrid learning structure would be the best.
- With the scheduling, it was a bit difficult in terms of focusing on the new lectures and TA sessions while still working on the previous assignments.
- Even though the lectures were online they still felt interactive and were also well organized.
- The students thought that the digital format of the TA sessions made it easier for the students to attend more sessions because it did not require a physical presence. However, one remarked that there were some difficulties associated with asking questions over the Zoom Chat. Specifically not knowing where in the queue their question was, when a TA was responding to multiple queries. Pointing out that asking questions one on one is much easier.
- One student suggested that if some of the TA sessions could be exercise sessions that could be good. Perhaps, one session dedicated to doing one to three exercises for every report.

Course Material and Literature

- The students generally believed that the compendium was very well organized and easy to follow. Additionally the exercise book was also good and useful.
- One student highlighted that the test systems used in the compendium as well as those used in the assignment were very simplistic. That it would be interesting to look at a more realistic test system within some type of software like PowerFactory. However, this course content is not covered within the scope of this course but would be included within the Masters FACTS course.

Overall, the students found the course to be very enjoyable, highlighting that it was very well organized. Although, it required a great deal of time and attention. It was discussed that the report writing of the course, particularly for the report D2, was very time consuming. So, if the requirements for the report writing were minimized it would greatly reduce the time spent for the students on the course overall. Another suggestion offered was solving exercises during the TA sessions which would help the students. All the topics discussed helped provide useful information for improvement of the course next year.