ELEC-E8105 Non-linear filtering and parameter estimation Arrangements of Course in Spring 2020

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January 8, 2020

Course Personnel



Lecturer:
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Please add "ELEC-E8105" to the subject when sending mail concerning the course.

Schedule

- Lectures: 12 lectures (first: Jan 8, last: April 1).
 - Lectures are on Wednesdays at 15:15–17
 - Lectures are in T2 in Konemiehentie (CS-House).
 - EXCEPT: on 19.2. no lecture, no exercise session
- Exercise sessions: 10 sessions (Jan 15 April 1).
 - Exercises are before the lectures at 14–15 in the same place as lectures (T2).
 - EXCEPT: on 12.2. and 19.2. no exercise session
- Examination on Wednesday April 8th 2019 at 14-17 in T2.
- Project work:
 - February 12: Project work information session
 - February 26: Selection of project work topic
 - April 12: Project work deadline

Requirements and Grading

- This course is worth 5 ECT.
- Course requirements:
 - Examination on (April 8th).
 - Home exercises (first DL Jan 15). At least 1/2, with 3/4 grade increase +1.
 - Project work (Topic DL February 26, Final DL April 12).
- Grading:
 - The grade of the course is the maximum of the grades of the examination and project work.
 - You need to pass both the examination and the project work to pass the course.
 - To pass the course, you also need to do at least 1/2 of the home exercises.
 - If you do 3/4 of the exercises, your grade increases by one $(1 \rightarrow 2, 2 \rightarrow 3, 3 \rightarrow 4, 4 \rightarrow 5)$.

Exercise Sessions

- Pen and paper exercises and coding tasks in Matlab/Octave (optionally Python/R).
- One person will be randomly selected to present his/her answer.
- For computer exercises there is a projector available for plugging in laptops to.
- The course assistant is also available for help.
- With prior agreement, the exercises can be returned via e-mail to the course assistant as well.

Project Work

- Project work is done between February 26 and April 12.
- The project work is a short research report of the topic, that also typically includes some numerical simulations/examples.
- There will be a list of possible topics in MyCourses.
- You are also encouraged to come up with a topic of your own.