

ELEC-E8105
**Non-linear filtering and parameter
estimation**
Arrangements of Course in Spring 2019

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Course Personnel



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

- Lectures: 11 lectures (first: Jan 9, last: March 27).
 - Lectures are on Wednesdays at 15:15–17
 - The first 2 lectures in TU1 in Maarintie 8 (TUAS).
 - The remaining lectures in T2 in Konemiehentie (CS-House).
 - EXCEPT: on 20.2. no lecture, no exercise session
- Exercise sessions: 10 sessions (Jan 16 – March 27).
 - Exercises are before the lectures at 14–15 in the same place as lectures (TU1 or T2).
 - EXCEPT: on 20.2. no lecture, no exercise session
- Examination on Wednesday April 10th 2019 at 14-17 in TBA place.
- Project work:
 - February 27: Selection of project work topic
 - April 12: Project work deadline

Requirements and Grading

- This course is worth 5 ECT.
- Course requirements:
 - Examination on (April 10th).
 - Home exercises (first DL Jan 16). At least 1/2, with 3/4 grade increase +1.
 - Project work (Topic DL February 27, 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 is done between February 27 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.