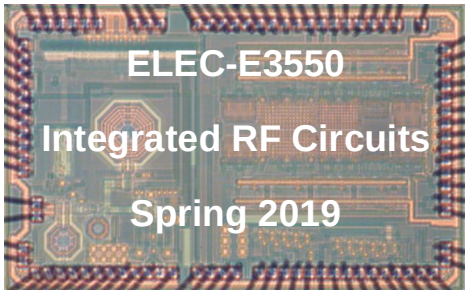

Schedule: **February 26th – May 14th 2019**
Time: **12.15 - ca. 15.00 (lecture + exercises)**
Lecture room: **Micronova / room 2190 ("Iso Sali")**

Teachers: D. Sc. Kari Stadius email: kari.stadius@aalto.fi room 2195 (MT8)
M.Sc. Mahwish Zahra email: mahwish.zahra@aalto.fi room 2186 (MT8)
M.Sc. Kalle Spoof email: kalle.spoof@aalto.fi room 2190 (MT8)

Mandatory course registration with Oodi! (lectures)

Content

After the course the student is familiar with the basic IC structures used in RF IC design and is capable of using these in different building blocks. In addition, the student knows special features of linear and non-linear integrated high-frequency circuits in RF design and is familiar with RF IC system design basics.

Study methods

In this course we emphasize the learning principle "learning by doing". This means that students are encouraged to do self-learning and with plenty of exercises students familiarize themselves with practical RF IC design. Number of lectures is reduced to six to keep the work load reasonable and there will be no final exam. Mandatory participation on lectures is required to successfully complete the course. Each meeting consists of the following segments:

- Lecture: introduction to the topic
- CAD exercises (simulations)
- Homeworks (calculations)
- Self-learning assignments (references or essays, find answers to given questions)

Project work

The course includes a larger design work, in which each student designs a receiver front-end. The topic details and more information will be given in the first meeting. Students will report their outcome in a short oral presentation in the final meeting. The CAD exercises are constructed in such a manner that they will provide appropriate skills to complete the project work.

Assessment methods and criteria

Each assignment will be graded from 0 to 5. The overall course grade will be determined by the following weighting: project work (30%), Self-learning assignments (30%), homeworks (20%), and CAD-exercises (20%). There will be no final examination.