EE2S1 Signals and Systems

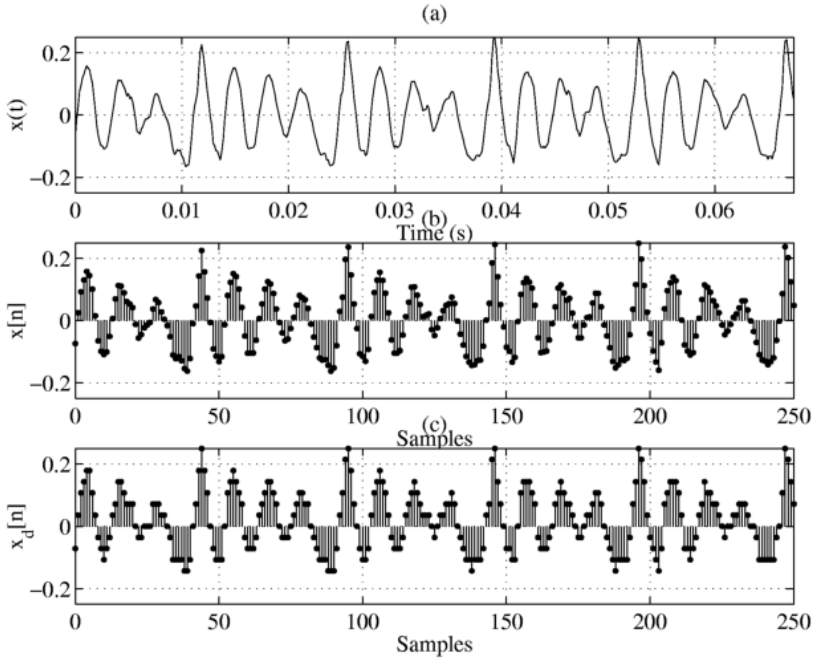
Part 2 – discrete-time (mostly)

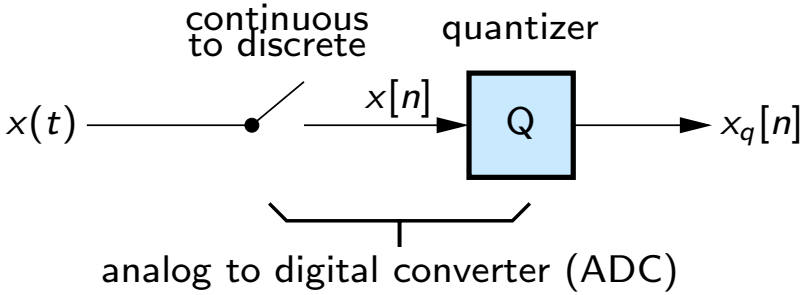
Alle-Jan van der Veen

Organization – Part 2

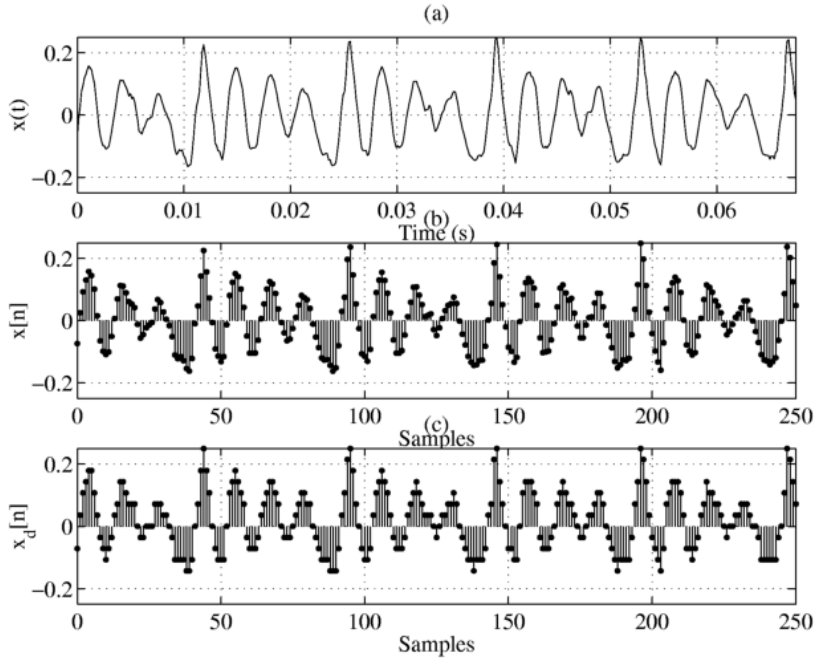
- Lectures (2 per week, 9 in total)
- Course labs (one per week, 3 in total), starting 7 October
- Self-study:
  - Book: most of Ch. 5–10 (see Brightspace)
  - Recorded video lectures (Collegerama)
  - Exercises from the book; past exams

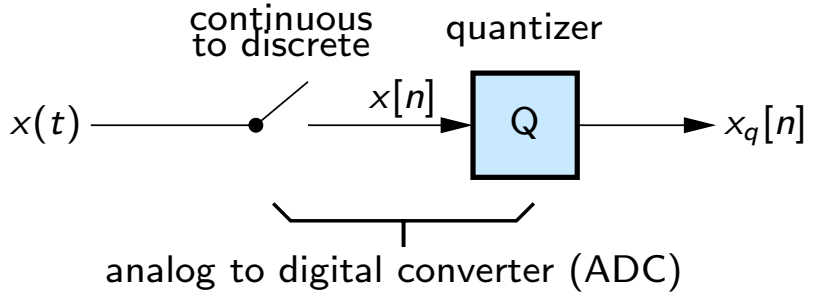
Discrete-time signals

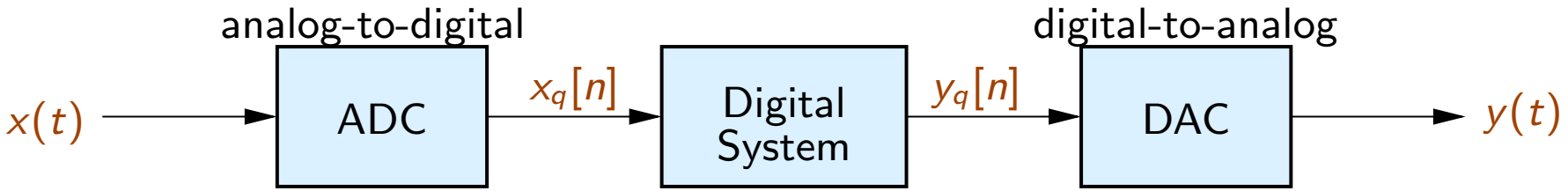




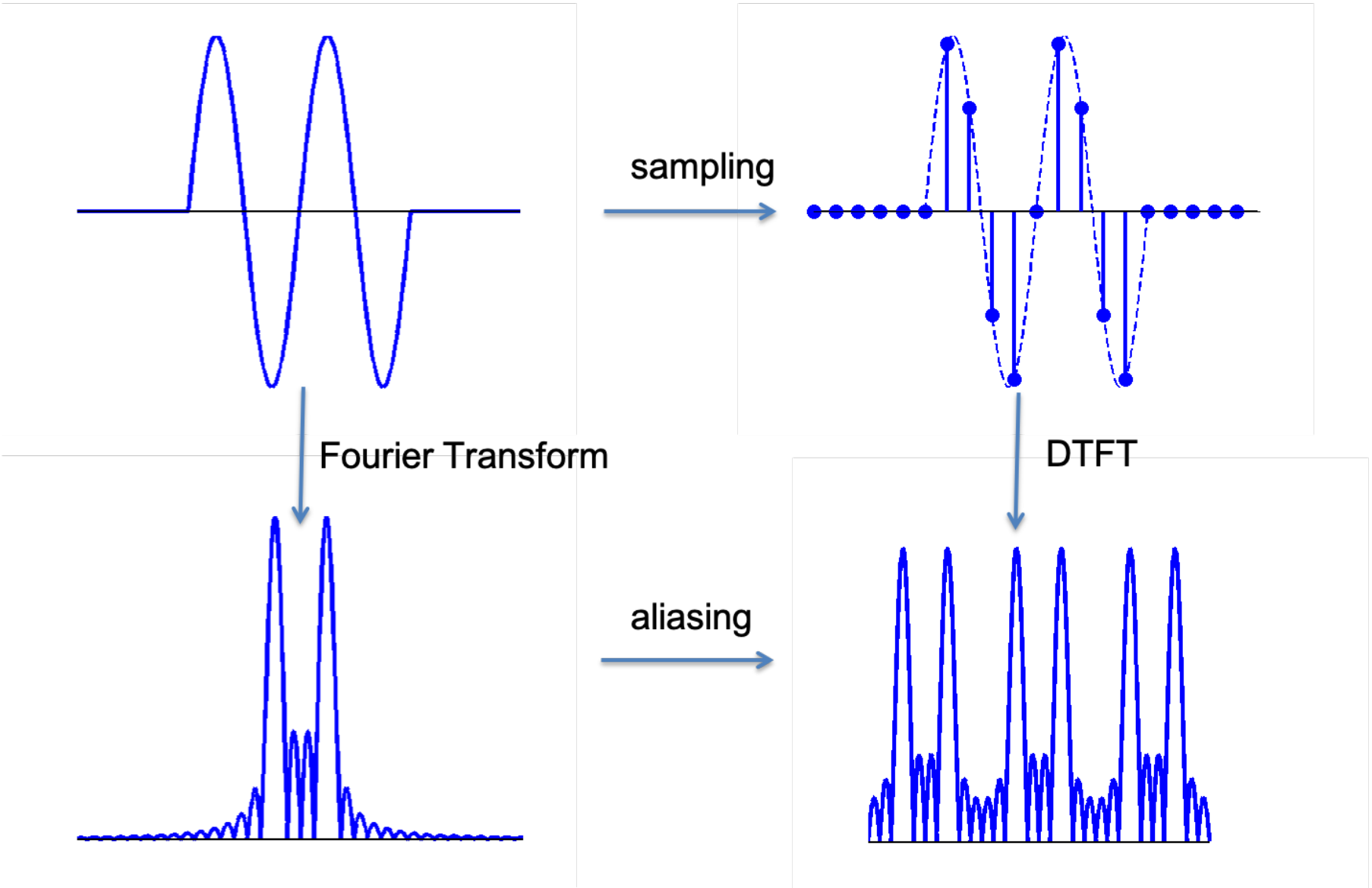
Discrete-time signals





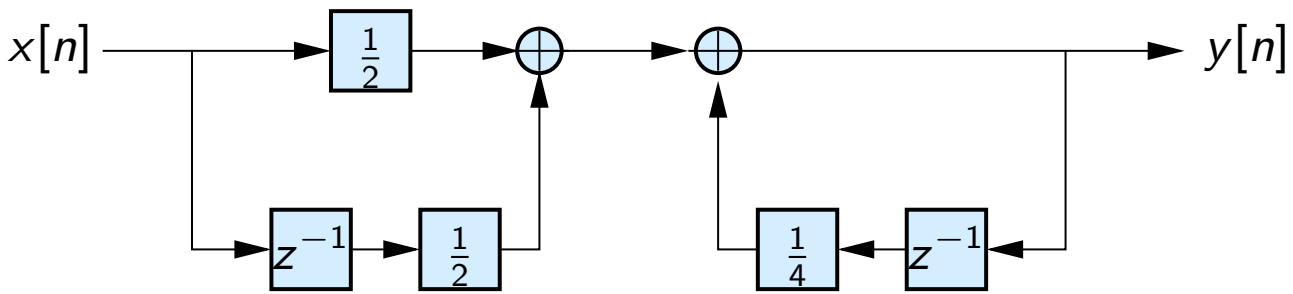


Discrete-time signals

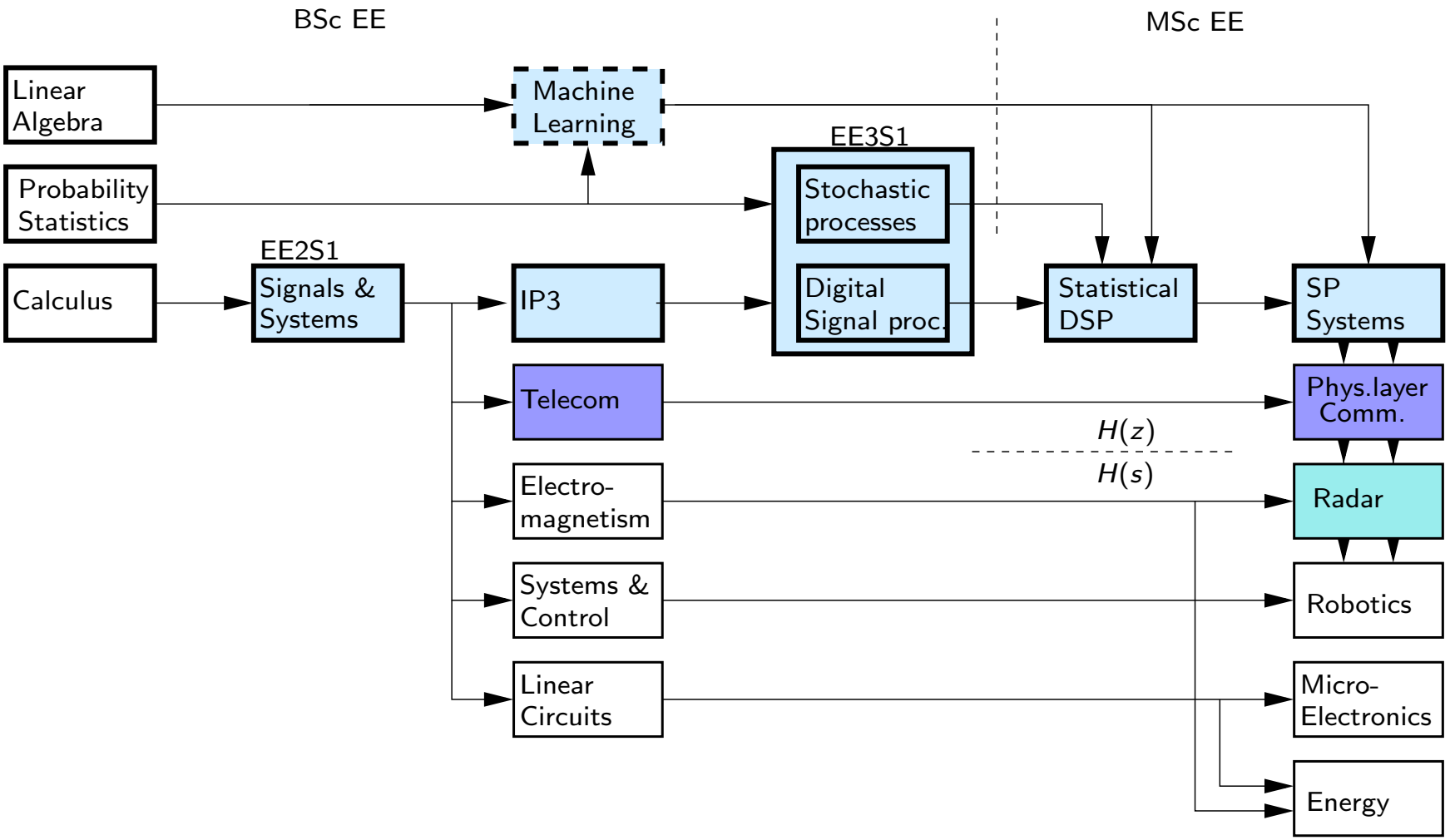


Part 2

- The Fourier transform
- Sampling and reconstruction
- Discrete time LTI systems courselab 1
- The z-transform
- The Discrete Time Fourier Transform courselab 2
- Analog and digital filter design courselab 3
- Realizations



Overview of your curriculum



Course labs

- The course labs are pass/fail; you need a pass on each of the labs
  Pass needed for access to IP3 in Q2
- Work in groups of 2 (create your own groups in Brightspace)
- Python using Jupyter Colab
- Tellegenhall (presence required; some audio equipment needed)
- Labs are on Tuesday; submission deadline Thursday evening