

TSKS02 Telecommunication Tutorial Plan Autumn 2018

These are suggested tasks, from the course book, suitable to solve during the tutorials in Signal Theory. Tasks in parentheses are recommended for home studies. All tasks in the book are good problems for the course. You should see this list as a suitable selection.

Nr	Part	Tasks
1	Linear filters: LTI-systems, convolution.	3.1-3.7
2	Linear filters: LTI-systems, convolution. The Fourier transform	3.8-3.13
3	Linear filters: The Fourier transform, LP-, HP-, BP-, and BS-filters.	3.14-3.17
4	Channel models: Channels	4.1-4.4
	Analog Communication: AM, FM, PhM	5.1-5.4
5	Analog and digital comm.: Pulse modulation, DM. Error probabilities, OOK, ASK, PSK, FSK, QAM.	6.1-6.6, 7.1-7.4
6	Channel coding: Error control codes, dimension, redundancy, rate. Linear codes, repetition codes, Hamming codes.	8.1-8.7
7	Source Coding: Tree codes, Krafts inequality, Huffman codes, run-length coding.	9.1, 9.2, 9.3
8	Mixed problems: Most of the above.	

You are most welcome to submit specific questions and requests before each tutorial. Send them by email to your tutorial teacher (ozgecan.ozdogan@liu.se). In that way you can help your teacher to plan the tutorial according to your wishes and needs.