

Signal Processing 2

Course no. 389.170, VU 4.5 ECTS

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Time and Place. The course starts on October 1, 2020, at 11:00 in lecture hall EI 4. Regular dates:

- Thursday 11:00–12:00, primarily online exercises, otherwise lectures in lecture hall EI 4
- Friday 10:30–12:00, lectures in lecture hall EI 4

Prerequisites. We require basic knowledge of:

- mathematics, in particular probability theory and linear algebra
- signals and systems theory, e.g., convolution, Fourier analysis, z -transform

Course Grading. Grading is based upon:

- exercise credit points and written exam score
- performance at oral exam

Exercise Classes. Solving problems allows students to accumulate up to 40 credits. Your attendance at the online exercise classes is mandatory and course registration via TISS is required until October 13, 2020 (don't forget to join the TUWEL course). If you turn in a solution, you may be asked to discuss it in class, and if you are not present, no credits for that problem will be given. Up to 9 bonus credits can be collected by presenting problems on the board during class. The problem sets will be made available on TUWEL one week before they are due.

Solutions have to be handed in by 9:00 (sharp) on Wednesday before the exercise class as a PDF via TUWEL. Late solutions will not be graded. Solutions that are typeset via LaTeX or similar tools are preferred.

You must write up original solutions on your own. Copying solutions from other students is considered as a serious offense. However, you are encouraged to discuss the problems in small groups. To be admitted to the written exam, at least 40% of all problems have to be solved successfully and at least one solution has to be presented in class.

Written Exam. The written exam lasts three hours and consists of four problems which sum up to 70 credit points in total. Electronic registration via TISS is required for the written exam. A copy of the lecture notes will be provided during the exam. No documents or electronic devices other than a calculator are permitted.

At least 35 points must be scored in order to pass the written exam. The grade for the written part of the course is then derived from the sum of the credit points obtained in the exercises and the written exam (denoted by z) according to the following table:

Total score	$50 \leq z < 70$	$70 \leq z < 85$	$85 \leq z < 100$	$z \geq 100$
Grade (written part)	G4	B3	U2	S1

Oral Exam. To be admitted to the oral exam, students must have passed the written part of the course.

Lecture Notes. Detailed lecture notes will be made available.

Links. For further information check the following links:

- TISS page (general information, course registration, exam registration)
<https://tiss.tuwien.ac.at/course/courseDetails.xhtml?courseNr=389170>
- TUWEL page (detailed administrative information, problem sets)
<https://tuwel.tuwien.ac.at/course/view.php?id=30967>