

Course

ASS - Analogue signals and systems

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^ General information

Long name	Analogue signals and systems
Approving CModule	<u>ASS_BaET</u>
Responsible	Prof. Dr. Harald Elders-Boll Professor Fakultät IME
Level	Bachelor
Semester in the year	winter semester
Duration	Semester
Hours in self-study	78
ECTS	5
Professors	Prof. Dr. Harald Elders-Boll Professor Fakultät IME
Requirements	basic courses mathematics and electrical engineering
Language	German
Separate final exam	Yes

Final exam

Details

study-accompanying tests and a final exam

Minimum standard

At least 24 of the 50 points that can be gained in total in the final exam and the two midterm tests during the semester.

In the final exam 40 points can be gained in total, in the two midterm test 5 points can be gained each yielding 10 points in total for the two tests.

Exam Type

^ Lecture / Exercises

Learning goals

Knowledge

Introduction to signals and systems
convolution in time domain
Fourier transform of analog signals
correlation functions
system representation in frequency domain; frequency response
Laplace transform; transfer function; stability of a system
Bode diagram
ideal analogue filter
sampling of analog signals

Skills

Analysis and modeling of electrical networks

Expenditure classroom teaching

Type	Attendance (h/Wk.)
Lecture	3
Exercises (whole course)	0
Exercises (shared course)	1
Tutorial (voluntary)	1

Separate exam

Exam Type

solving exercises within limited functional / methodical scope

Details

Two midterm tests with exercises dealing with the subjects from the lecture/tutorial that were covered up to that point.

Minimum standard

Two out of five points that can be scored in total per test.

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