



# SD1135 Project Course in Sound, Vibrations and Signals 15.0 credits

Fördjupningsarbete i ljud, vibrationer och signaler

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for SD1135 valid from Autumn 2007

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

Basic courses in Mathematics, Mechanics, Fluid Mechanics, MATLAB. Furthermore, the course requires a basic course in Sound and Vibrations corresponding to SD1115 or SD1120. Preferably also a course in Signal Analysis.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After the course, the participant should be able to

- apply knowledge and skills acquired in previous courses in solution of problems in sound, vibration and signals
- starting from real life problems, usually from industry or society, be able to
- identify and formulate a project task
- make a project plan
- carry out measurement projects
- carry out an information retrieval within the actual area
- review, and compile information within the area
- orally and in writing present the work according to the demands on content, structure and language
- identify and discuss ethical problems related to the engineering profession
- how a professional behaviour when judging the work of others
- use the basic terminology and tools for career planning
- explain the fundamentals of technology based entrepreneurship

## Course contents

Project works that are carried out individually or in groups of maximum two students

Advanced information retrieval, oral and written communication

Deepened knowledge of sound, vibrations and signals within the framework of the project work

Elucidation of the professional role of the Sound, Vibration and Signals Engineer as well as aspects of professional ethics, integrity, responsibility and reliability, active career planning, technology based entrepreneurship.

Invited guest-lectures give up to date information from different areas within the field of sound, vibration and signals.

## Course literature

Compendium, Handbooks, Journal Papers and Reports, Standards.

## Examination

- PRO1 - Project, 15.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

Approved course (PROJ; 15 university credits)

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.