FSD3603 Computational Aeroacoustics Project 3.0 credits

Beräkningsaeroakustik Projekt

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

Establishment

Course syllabus for FSD3603 valid from Autumn 2017

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

To be eligible to take this course, students must have successfully completed FSD3602 Computational Aeroacoustics or a similar course.

Language of instruction

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

Intended learning outcomes

After completing the course, students should be able to

- Perform an aeroacoustic computation on a relevant problem.
- Reflect on and indicate numerical and physical advantages and disadvantages of the various levels of simplification and modelling that they have used in performing the computation.
- Evaluate the computed aeroacoustic data in terms of its limitations and suggest possible steps that could be taken to improve accuracy and numerical efficiency.

Course contents

The course consists of a computational aeroacoustics project. The project's contents must be approved by the course examiner beforehand to ensure that the project will have an appropriate focus to enable the student to meet the intended learning outcomes of the course. The project will be presented and discussed in a seminar at the end of the course along with other projects within this course.

Course literature

In the project report, students must reference relevant scientific journal articles from which they have drawn upon in their project report.

Equipment

Computer

Examination

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.

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

To pass the course students must satisfactorily complete the course project, which should be presented in a written report.

Other requirements for final grade

This report must include introduction (where both the context and scope of the project are set out), methods, results, discussion and conclusions sections. Additionally they must actively participate in the course seminar, where they will demonstrate that they have met the learning objectives.

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.