

# FSD3203 Vehicle Engineering Research Training 7.5 credits

#### Fordonsteknisk forskarträning

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 FSD3203 valid from Autumn 2018

# **Grading scale**

P, F

# **Education cycle**

Third cycle

# Specific prerequisites

PhD student in the doctoral program Vehicle and Maritime Engineering.

# 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, the student have learned how to plan, perform and report a research study in vehicle technology.

#### Course contents

- Choose a hypothesis relevant to vehicle technology.
- Explain the theory that describes the chosen problem area.
- Suggest a way to perform a study.
- Evaluate the idea through a simulation study.
- Plan the experiment.
- Perform the study in, for example, a vehicle simulator, in a scaled-down, prototype or real vehicle.
- Summarize the work in a scientific report.
- Communicate the result orally.

# Disposition

- The PhD students are trained to formulate clear problem descriptions and research objectives.
- They are trained to present relevant theory.
- They will propose a structure for the study and receives feedback from the course leader.
- They evaluate the structure through a simulation study. If relevant, the structure of the study will be revised.
- The study is planned and performed by the doctoral student in, for example, a vehicle simulator or in a scaled-down, prototype or real vehicle.
- The results are analyzed and summarized in a scientific report.
- The result is also communicated orally.

## **Course literature**

Material handed out during course.

Course literature will include slides from the lectures as well as scientific articles related to the subject of the lectures.

## Equipment

Different for different projects. Planned in the beginning of the course.

### **Examination**

• INL1 - Assignments, 7.5 credits, grading scale: P, 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

- Perform one individual project
- Present the project both orally and in a written report

# 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.