

FSD3900 ECO2logy 6.0 credits

ECO2logy

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 FSD3900 valid from Autumn 2017

Grading scale

Education cycle

Third cycle

Specific prerequisites

This course is primarily aimed at PhD students within the Centre for ECO2 Vehicle Design. However, other PhD students are also welcome to participate, and those interested should register with the course management.

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 students should be able to:

- Describe the main environmental and socioeconomic aspects that are related to the transport systems.
- Discuss the advantages and disadvantages of different methods to assess design, vehicle concept and transport systems from an environmental and socioeconomic perspective.
- Assess the environmental effects of their own research within the Centre for ECO2 Vehicle Design and relate these to the needs of a future sustainable transport system

Course contents

The first day concentrates on global influences on the transportation systems; the second day focuses on societal response to these global factors, and the third day focuses on methods relevant to the assessment of the ECO2 dimensions of ecology and economy within vehicle design.

Disposition

The course is delivered through lectures, discussions and exercises. A written assignment is required for PhD students who obtain the course credits. In the assignment, the student should relate his/her research to the development of the society and assess the environmental impacts of the research. The assignment is presented to, reviewed by and discussed with other students during a half-day seminar. The course is given in close collaboration with the partners of the Centre for ECO2 Vehicle Design.

Course literature

The course literature consists of scientific papers and reports. Literature necessary to accomplish the written assignment is also included.

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.

To complete the course students are required to actively participate during lectures, discussions and exercises. Furthermore, an approved assignment is required.

Other requirements for final grade

To pass the course students the student must demonstrate in their report 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.