

ML111U Sustainable Transport Systems 2.0 credits

Hållbara transportsystem

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

Establishment

Course syllabus for ML111U valid from Autumn 2021

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

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 participant should be able to demonstrate a solid understanding of:

- basic concepts, challenges and opportunities that relate to the concept of sustainable
- development, with special emphasis on how a sustainability mindset may contribute to creating value for
- a company, its customers and society as a whole.
- frameworks of considerate importance to sustainable industry and transport, such as the Sustainable Development Goals of Agenda 2030 and the Science Based Targets initiative.
- how sustainability relates to the dynamics of complex systems, and how to utilize such understanding in strategic thinking about future practice.
- how differing world-views and perspectives among people and stakeholders drive different conclusions on which actions to take.

After completing the course, the participant should also be able to:

- perform an analysis of conditions and preconditions for increased sustainability in an industrial operation.
- suggest changes in a company's business strategy or business model to take additional steps
 towards a transition to a circular economy.
- actively assist in the company's ambition to contribute to a more sustainable development.

Course contents

In this course, students acquire a solid understanding of what sustainability is, how it may be addressed

in an industrial context, and how a sustainability mindset may contribute to creating value for a company,

its customers and society as a whole.

Examination

- SEM1 Seminars, 1.0 credits, grading scale: P, F
- PRO1 Project, 1.0 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.

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

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.