



# ME2722 Green Economics 7.5 credits

Grön ekonomi

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

## Establishment

On 11/04/2019, the Dean of the ITM school has decided to establish this official course syllabus to apply from autumn term 2019 (registration number M-2019-0740).

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Industrial Management

## Specific prerequisites

Satisfies the requirements for a Degree of Bachelor

Documented knowledge in English B or the equivalent.

## Language of instruction

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

## Intended learning outcomes

On completion of the course, the students should be able to describe and analyse:

1. the driving forces behind the climate changes
2. which role market forces and policies play for a transition to a green economy
3. the importance of technical changes, innovation and entrepreneurship for a transition to sustainable growth
4. the importance of the financial market for transition to a green economy

## Course contents

The course starts with an overview of how the modern economics relates to the challenges that have been created by ongoing climate changes and why the global heating can be seen as a market failure. Thereafter follows three separate yet coherent blocks each of which is concluded with a study visit linked to the focus of the block.

The first block is about the resources of nature, such as sustainability and overexploitation of the resources of the planet. Here, driving forces of the increased concentration of carbon dioxide in the atmosphere are also discussed, as well as global distribution issues with regard to climate adaptation.

Block two deals with finance, innovations and economic growth. Here, the students will deal with basic economic studies about growth and climate such as the Stern report, climate models of William Nordhaus and the endogenic theory of growth. The block treats the financial costs for a climate adaptation, which meets the aim of the Paris Agreement and how these can be created. Further, preconditions and barriers for green innovations are studied both theoretically and empirically.

The final block is policy oriented and deal with global, national, company and individual levels. It treats questions such as international agreements, emission trading, regulations, taxes and subsidies. The block also studies how both mandatory legislation and self-regulation influence the companies' will and ambitions to green adaptation. Here, differences are also studied between different countries and industries

## Examination

- PRO1 - Project, 3.5 credits, grading scale: P, F
- TEN1 - Examination, 4.0 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.

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.