

ME2722 Green Economics 7.5 credits

Grön ekonomi

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 ME2722 valid from Autumn 2015

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

At least 120 credits of higher education, of which at least 30 credits within industrial management/mathematics/economics/statistics.

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 student should be able to:

- 1. Evaluate project investments regarding economic sustainability and circular economics
- 2. Compare and evaluate different projects to be able to recommend which and why a certain project is the most efficient regarding sustainability
- 3. Assess market potential for "green innovations"
- 4. Assess possibilities to finance "green innovations" via own capital or bank loans
- 5. Understand the meaning of circular economy
- 6. Measure expected economic effects of green economics
- 7. Handle basic tools to understand how the green economics functions
- 8. Know and carry out empirical studies within green economics by means of theory, data and quantitative methods
- 9. Be familiar with the scientific front when it comes to green economics
- 10. Communicate both orally and in writing the scientific front when it comes to green economics.

Course contents

The accelerating climate changes have increased the interest within both the private and the public sectors for the transition to a green economics. Currently, there is an ongoing extensive debate and activity among business students, technology students, environmentalists, innovators, entrepreneurs, supervisory authorities and decision-makers when it comes to appropriate measures and methods to influence the society towards a greener economy. This applies to the research literature, to different policy areas and to the practical activities among companies and public authorities. Important issues are the need for incentive measures and regulations, as well as the effects on innovation activities, growth and employment.

The primary aim of this course is to give the students basic tools, and an ability to analyse how green economics functions. The course also intends to increase the students' employment possibilities within the energy and environmental sector, related research institutes, public authorities and within companies and organisations that deal with environmental innovation activities.

The course is an appropriate complement to other courses within the engineering and the business sector. The students will to learn apply current theories and methods to analyse the effects of green policy and to understand empirical analysis to assess the importance of green economics and resource economics.

Course literature

Relevant articles from the scientific literature.

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.

Examination and project work

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.