

MJ2516 Sustainability perspectives for assessing and designing research, projects and policies 3.0 credits

Hållbarhetsperspektiv för att utvärdera och utforma forskning, projekt och policyer

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

On 2021-10-15, the Dean of the ITM school has decided establish this official course syllabus to apply from spring term 2023, registration number: M-2021-2021. M-2021-2021.

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

English B/6 or equivalent; Degree of Bachelor or equivalent in Energy engineering

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to:

- 1. Give an account of different interpretations of sustainability and sustainable development in relation to the most important international agreements in the area
- 2. Give an account of relevant challenges for sustainable development in relation to specific research domains
- 3. Critically reflecting, give an account of how the student's own research field relates to Agenda 2030 and the United Nations' (UN's) global goals for sustainable development
- 4. Survey, explain and evaluate how an energy project relates to sustainability paradigms and contextualise this in terms of synergies and balances with the sustainability goals

Course contents

Based on the latest science in the area, central sustainability concepts and tools are presented, for examining how energy research, projects and policy can influence (positively or negatively) the fulfilment of each of the 169 targets in the UN's 17 goals for sustainable development.

The course focuses on the latest science to assess the relationships between research, project and policy and a broader sustainable development.

The students will in the course learn to use tools to evaluate the sustainability consequences of a specific energy project.

The course consists of lectures and practical exercises.

Examination

• PROA - Project and presentation, 3.0 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.

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.