AK122V Artificial Intelligence and Sustainable Development 4.0 credits

Artificiell intelligens och hållbar utveckling

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

Establishment

On 17 August 2021, the Dean of the ABE school has decided to establish this official course syllabus to apply from spring term 2022, registration number: A-2021-1425.

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 passing the course, the student should be able to:

- - Give an account of the relationship between artificial intelligence and sustainable development.

- - Discuss possibilities and risks with AI from an environmental and societal perspective.

- - Critically review statements about AI from a sustainability perspective.

Course contents

In this course, we study AI from a sustainability perspective and delve into how the new technology can both promote sustainability and reduce it depending on how it is used. We read about the problems that have existed around AI so far, such as bias in dataset, monitoring, ownership concentration around tools and models, but also about how the new technology has enabled improvements from a social and environmental perspective. We discuss the emerging field of "smart farming" where AI is used to optimise cultivation and also see how the new technology can improve nature conservation in vulnerable areas.

Examination

 • INL1 - Assignment work, 4.0 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.