

## AI and Sustainability 4 credits

AI och hållbarhet 4 hp

Second cycle

Main field: Industrial Management, Second cycle, has only first-cycle course/s as entry requirements (AIN)

Syllabus is adopted by the Research and Education Board (2022-10-17) and is valid for students admitted for the spring semester 2023.

### Placement in the Academic System

The course is given as a single subject course.

### Prerequisites and Conditions of Admission

Degree of Bachelor of Science including an independent project 15 credits or Degree of Bachelor of Science in Engineering including an independent project 15 credits, or the equivalent of 180 Swedish credit points or 180 ECTS credits at an accredited university.

Applicants must have written and verbal command of the English language equivalent to English course 6 in Swedish UpperSecondary School.

### Course Objectives

The aim of the course is the student develops his knowledge and ability to reason about how artificial intelligence (AI) can be linked to sustainable development in a business context

Following successful completion of the course the student should be able to:

#### *Knowledge and understanding*

- explain the concept of sustainable development
- textruta explain the meaning of central models that describe sustainability transitions

#### *Skills and ability*

- in a qualified manner, discuss the connections between sustainable development, changes, companies and AI

#### *Judgement and approach*

- reflect on ethical issues surrounding AI and sustainable development

### Primary Contents

The course introduces the concept of sustainable development and its various dimensions. The course also introduces central models and concepts for understanding and explaining transition processes on a system level (socio-technical systems). The course covers how to understand these processes from a business perspective and what role AI can play

in these processes.

The course introduces concepts, conceptual frameworks and empirical material.

### Teaching Formats

The course is based on blended learning in the form of lectures, seminars and online teaching. Teaching materials will be available via the university's learning platform.

The teaching language is English.

### Examination

The overall grades of Fail or Pass will be awarded for the course.

The course is examined through individual written assignments and individual oral presentations.

Name of the test		Grading
Assignments	2 credits	U/G
Oral Presentations	2 credits	U/G

If there are special reasons, the examiner may make exceptions from the specified examination format and allow a student to be examined in another way. Special reasons can e.g. be a decision on learning support.

For elite sports students according to Riktlinjer för kombinationen studier och elitidrott vid Högskolan i Halmstad, DNR: L 2018/177, the examiner has the right to decide on an adapted examination component or let the student complete the examination in an alternative way.

### Course Evaluation

Course evaluation is part of the course. This evaluation should offer guidance in the future development and planning of the course. Course evaluations should be documented and made available to the students.

## **Course Literature and Other Study Resources**

The course literature is a compendium consisting of scientific articles and book chapters.