

## AI and Data Strategy 5 credits

AI och datastrategi 5 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 (2022-11-22) 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 or Degree of Bachelor of Science in Engineering 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 Upper-Secondary School.

### Course Objectives

The aim of the course is to provide theoretical insights and practical tools for describing and analysing institutional, industrial and firm-level factors that govern artificial intelligence (AI) data coordination and (re-) use.

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

#### *Knowledge and understanding*

- identify, define and describe key dimensions and factors at the firm level that are related to AI data access and trade
- explain institutional frameworks that conditions and guides market behavior in AI data coordination

#### *Skills and ability*

- discuss and analyse how and why data access and sharing is instrumental for AI based innovation industrial and organizational transformation
- describe the top-down institutional guidance in data trade and the problems in that when applying to machine-generated data
- analyse practices and behavior at the firm level in data coordination

#### *Judgement and approach*

- reflect on the kind of changes occurred in a networked AI environment that have re-defined knowledge sharing rules in industrial firms
- reflect on how to organize AI data coordination in technology-based firms

### Primary Contents

The course links literature on institutional economics and industrial organization on data coordination and data trading.

The course deals about institutions, data access and data (re-) use in an AI environment. The course consists of three modules:

- Institutions, laws and regulations related to AI data access, sharing and (re-) use.
- Data properties with a bearing on AI data coordination.
- Firm-level factors that affect value creation and AI data coordination.

### Teaching Formats

The teaching consists of lectures, homework, group discussions, seminars, exercises and supervision in the form of analysis and of practical problem-solving with cases, and presentation of group work.

Teaching is conducted in English and with blended learning.

### Examination

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

The course is examined on the basis of three reports that will be presented and defended at seminars and handed-in after the seminars.

Name of the test		Grading
Seminar Report I	1,5 credits	U/G
Seminar Report II	1,5 credits	U/G
Seminar Report III	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 kom-

inationen 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

Selected chapters from:

Agrawal,A; Gans, J; Goldfarb, A (eds.) *The Economics of Artificial Intelligence: An Agenda*. University of Chicago Press, 2019

OECD Enhancing Access to and Sharing of Data: Reconciling Risks and Benefits for Data Re-use across Societies, OECD Publishing, 2019

Additional materials such as selected academic journal articles will be distributed during the course.