UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Artificial Intelligence A1N

7.5 credits

Course code: IT776A
Version number: 7
Valid from: 1 July 2026
Ratified by: Curriculum Committee for Informatics
Date of ratification: 5 February 2026

1. General information about the course

The course is provided by the University of Skövde and is named Artificial Intelligence A1N (Artificiell intelligens A1N). It comprises 7.5 credits and is a second-cycle course. The level of progression is A1N.

The course is a part of the main field of study in Informatics. The disciplinary domain of the course is Technology.

2. Entry requirements

A Bachelor's degree equivalent to a Swedish kandidatexamen of 180 credits (or the equivalent).

A further requirement is proof of skills in English, equivalent of studies at upper secondary level in Sweden, known as English 6 or English level 2. This is normally demonstrated by means of an internationally recognized test, e.g., IELTS, TOEFL, or an equivalent.

3. Course content

The course gives an introduction to artificial intelligence and then focuses on artificial intelligence as a central component within the data science. It presents and discusses how artificial intelligence relates to other areas within data science as, for example, data mining, information fusion, and decision support systems.

In the course current challenges and projects within artificial intelligence will be presented and discussed. Furthermore, ethical and philosophical questions in relation to research in and application of artificial intelligence are addressed.

4. Objectives

After completed course the student should be able to:

- on an advanced level describe current challenges within the area of artificial intelligence,
- critically reflect and discuss ethical and philosophical questions within artificial intelligence,
- on an advanced level describe how artificial intelligence is related to other research and application areas within Data Science and
- on an advanced level critically describe how artificial intelligence techniques can contribute to automated decision support.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The examinations of the course consist of the following modes of assessment:

- **Supervised written examination**
  4.5 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Seminar assignment**
  1 credit, grades: G/U
- **Group assignment**
  2 credits, grades: G/U

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of lectures and seminars/group discussions.

The teaching is conducted in English.

7. Course literature and other educational materials

Russel, S. & Norvig, P. (2010). *Artificial Intelligence. A modern approach*. Boston: Pearson Education. ISBN 0132071487.

Articles according to a reference list is provided by the teacher.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.