UNIVERSITY OF BORÅS

Artificial Intelligence for Business Administration
Artificiell Intelligens för affärsledning
7.5 credits
7.5 högskolepoäng

Ladok Code: A317TG
Version: 2.0
Established by: Committee for Education in Technology 2023-09-01
Valid from: Autumn 2023

Education Cycle: First cycle
Main Field of Study (Progressive Specialisation): Industrial Economics (G1N)
Disciplinary Domain: Technology
Prerequisites: General entry requirements for university studies.
Subject Area: Industrial Engineering and Management
Grading Scale: Fail (U) or Pass (G)

Content

This course provides an overview of the concept of artificial intelligence (AI) in relation to business management, divided into three segments: Procurement & SCM (Supply Chain Management), Product Development & Production, and Sales & Finance. The course will cover examples of the application of artificial intelligence within the aforementioned domains, aiming to provide a foundational understanding of the associated advantages, disadvantages, weaknesses, and opportunities. Additionally, the course will offer examples of algorithms and their utilization in creating artificial intelligence, along with how these are applied in business management across the three segments. The curriculum encompasses both theoretical and practical aspects. The theoretical component addresses management, artificial intelligence, evaluation, and to some extent, computer science, to furnish a fundamental comprehension of these concepts. In the practical component, students will assess existing solutions and will also formulate requirements for their own solutions within each segment. The objective is to equip students with sufficient insight to be able to commission and evaluate a proposed solution.

Upon completion of the course, students should possess an understanding of fundamental general concepts within the realm of Artificial Intelligence, as well as specific concepts within each segment. Students should also be capable of evaluating a proposed solution and specifying requirements for a basic AI-based solution within each segment.

Learning Outcomes

Upon successful completion of the course, the student should be able to:

1. Knowledge and understanding
1.1. Explain fundamental concepts related to artificial intelligence, Big Data, and computer science.
1.2. Describe and elucidate terms within artificial intelligence relevant to Procurement and SCM (Supply Chain Management).
1.3. Describe and elucidate terms within artificial intelligence relevant to Product Development & Production.
1.4. Describe and elucidate terms within artificial intelligence relevant to Sales & Finance.

2. Skills and abilities
2.1. Specify a basic AI-based solution within Procurement and SCM.
2.2. Specify a basic AI-based solution within Product Development & Production.
2.3. Specify a basic AI-based solution within Sales & Finance.

3. Evaluative Capacity and Approach
3.1. Assess whether a proposed AI-based solution meets specified requirements

Forms of Teaching

The course consists of lectures, examples, and case studies.

The languages of instruction are English and Swedish.

Forms of Examination

The course will be examined through the following examination elements:

Assignment 1
Learning outcomes:
Credits: 2.5
Gradingscale: Fail (U) or Pass (G)

Assignment 2
Learning outcomes:
Credits: 2.5
Gradingscale: Fail (U) or Pass (G)

Assignment 3
Learning outcomes:
Credits: 2.5
Gradingscale: Fail (U) or Pass (G)

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

Scientific article. Material provided on the University of Borås' learning platform.

Course literature and practice materials will predominantly be in English.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

The course is offered within the program Industrial Engineering - Business and Engineering, with a specialization on Digitalization.

This syllabus is a translation from the Swedish original.