



School of Economics and Management

INFN65, Informatics: Business and Artificial Intelligence, 7.5 credits

Informatik: Verksamhet och artificiell intelligens, 7,5 högskolepoäng
Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2019-09-11 and was last revised on 2024-09-18. The revised syllabus comes into effect 2024-09-18 and is valid from the spring semester 2025.

General information

The course is elective within the Master's Programme in Information Systems and optional within the Master's Programme in Data Analytics and Business Economics.

Language of instruction: English

Main field of study Specialisation

Information Systems A1N, Second cycle, has only first-cycle course/s as entry requirements

Informatics A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

This course aims to provide an insight into designing business e.g., Processes (BPs), decisions and Artificial Intelligence (AI) that are building today's businesses.

On completion of the course, the student shall have a thorough understanding of how AI shapes and supports today's businesses e.g., processes and decisions and their design. The student shall be able to identify problems that can be solved by, or decisions that can be made or supported by, AI and be able to implement solutions to aid the aforementioned.

Knowledge and understanding

To pass the course, the student must demonstrate knowledge of and understanding of

- how AI is part in shaping today's businesses
- challenges that business digitalisation and artificial intelligence poses in organisations
- central terms used in the problem area of artificial intelligence and business

Competence and skills

To pass the course, the student must demonstrate competence and skills individually or in groups to

- identify problems that can be solved by, or decisions that can be made or supported by, AI in business
- implement solutions to aid business improvement
- designing business and artificial intelligence
- manage both managerial and technical aspects of business
- compare and evaluate different artificial intelligence tools

Judgement and approach

To pass the course, the student must demonstrate the ability to

- critically evaluate the limitations and possibilities of AI technology
- evaluate AI impacts on business, organisations and society

Course content

The course focuses on the challenges that business digitalisation and artificial intelligence poses in today's organisations. To properly manage e.g., processes and business decisions, both managerial and technological aspects must be considered in conjunction. By studying business and artificial intelligence and thorough hands-on workshops, the course focuses on how AI and business digitalisation alters internal and external parts of business within and across organisations.

Course design

The teaching consists of lectures, supervision and laboratory sessions. The teaching is research based and presents examples from AI-initiatives from different contexts.

Assessment

The assessment is based on an individual written exam, seminars and a group project. Re-examinations are offered in close conjunction with the first examination.

The test and course grades are determined by the course examiner. The examiner is entitled to change the grades given by the teachers on the course if this does not violate Chapter 6, Section 24 of the Higher Education Ordinance (1993:100).

Academic misconduct such as cheating, plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 10 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the university (and all the faculties of the university).

Examinations

- On-Campus Written Exam, 3.0 cr, grading scale: U-A, individual examination
- Seminars, 1.0 cr, grading scale: U-G, individual examination
- Group Project, 3.5 cr, grading scale: U-G, group examination

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: U=Fail, E=Sufficient, D=Satisfactory, C=Good, B=Very Good, A=Excellent

Grade (Definition) Points or percentage out of maximum points. Characteristic.

A (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

B (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

D (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the student must have been awarded the grade of E or higher.

Grading rules and definitions

Examination grades

Examinations are graded according to the grading scale U-A or the grading scale U-G (Fail-Pass).

Course grade

A passing grade on all examinations is required to pass the course.

1. For each examination with the grading scale U-A, the obtained points are multiplied by the number of credits for the examination. Grades without points are converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.
2. The products of the included examinations are summed up and divided by the total number of credits of the included examinations.
3. This results in a weighted average which determines the course grade. 85–100 gives the grade A, 75-84 gives the grade B, 65-74 gives the grade C, 55–64 gives the grade D, 50–54 gives the grade E.

Examinations with the grading scale U-G are not included in the calculation of the course grade.

Entry requirements

Admission to the course requires English 6 and the courses: "Informatics: Introduction to Information Systems, 1-30 cr", "Informatics: Information Systems and Business Development, 31-60 cr", "Informatics: Bachelor Degree Project (Thesis), 15 cr", and further 15 cr informatics/information systems at Bachelor level (G2F), or the equivalent.

Students with knowledge equivalent to the first semester of the *Master's Programme in Data Analytics and Business Economics (EAGDA)* are eligible to be admitted to this course.

Further information

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose their seat on the course.

For transitional provisions with regard to previous courses, please contact the study adviser for an individual assessment.

If the course is discontinued, there may be limited opportunities for re-examination. Please contact the study adviser for information.