School of Economics and Management

INFA46, Informatics: Generative Artificial Intelligence in Information Systems, 3 credits

Informatik: Generativ artificiell intelligens i informationssystem, 3 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2025-02-14. The syllabus comes into effect 2025-02-14 and is valid from the autumn semester 2025.

General information

The course is given as a freestanding course and for exchange students.

Language of instruction: English

Main field of study	Specialisation
Informatics	G1N, First cycle, has only upper-secondary level entry requirements
Information Systems	G1N, First cycle, has only upper-secondary level entry requirements

Learning outcomes

Upon completing the course, the student should have basic general knowledge of information systems. The student should be able to identify the different parts of an information system and explain their nature, their preconditions, and development opportunities. The student should also have a basic conceptual understanding of generative artificial intelligence in the form of Large Language Models, and the opportunities and challenges associated with its use. The student should be able to plan for the integration of language models as components of an information system, and discuss the consequences, advantages and disadvantages of this.

Knowledge and understanding

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

- information systems and their components at a general level
- large language models and concepts associated with large language models at a conceptual, non-technical level

Competence and skills

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

- identify components of an information system
- describe components of an information system
- analyse components of an information system from the perspective of an enterprise
- describe, at a basic conceptual level, large language models and their components
- reason about the integration of large language models as components of information systems

Judgement and approach

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

- account for the advantages and disadvantages of information system configurations

Course content

The course covers

- information systems
- generative artificial intelligence in the form of large language models
- integration of generative intelligence in information systems

Course design

The teaching consists of lectures and supervision.

Assessment

The assessment is based on an individual assignment and a project assignment.

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

- Individual Assignment, 1.0 cr, grading scale: U-G, individual examination
- Project Assignment, 2.0 cr, grading scale: U-A, 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

<u>**Grade** (Definition) Points or percentage out of maximum points. Characteristic.</u>

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 students 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

General requirements and studies equivalent of course English 6 from Swedish Upper Secondary School.

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.