School of Economics and Management

INFN50, Information Systems: Business Decision Management, 7.5 credits

Informatik: Business Decision Management, 7,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2013-09-20 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.

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

The aim of the course is that the student, after completion of the course, understands and can apply the principles of Business Decision Management (BDM) for operational decision management, can put these principles into their context, can design rule-oriented digital decision logic for automation of operational decision making, and can evaluate the benefits of the above.

The goal is also that the student understands and can apply basic process design where the necessary operational decisions are identified as decision-making models modelled in accordance with BDM principles to govern, support, and often automate them. The aim is therefore also that the student understands and can achieve Separation of Concerns (SoC), business agility, and system flexibility through separation of decision logic from process logic, both in operational modelling and in the technical implementation of support systems.

Knowledge and understanding

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

- the role and significance of operational Business Decision Management (BDM) in business and information systems and their architectures
- central concepts, phenomena, and discussions within the course problem area
- decision logic as a key component in operational decision making in business and information systems
- development of decision models and automated decision logic
- the interconnection between decision logic and process logic, and the relevance of this for business, information systems, and information systems architecture

Competence and skills

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

- identify requirements and design models for Business Process Management (BPM) and Business Decision Management (BDM), using relevant modelling notations and standards as well as tools to separate and integrate decision logic and process logic
- automate decision logic through appropriate models, techniques, and tools through specific technology solutions
- use course literature and, if necessary, other relevant literature to ground reasoning and to highlight, discuss, and analyse key concepts and phenomena within the course problem area

Judgement and approach

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

- assess and critically analyse key discussions and truth claims within the course problem area
- assess and reflect on the application of BPM, BDM, and decision automation for ISD from a learning perspective

Course content

The following topics will be covered:

- historical background of BDM
- system models and architectures for BPM and BDM
- decision logic and process logic in business, information systems and architectures
- relevant syntax and tools for BPM, BDM and decision logic
- specification and design of operational decision models and decision logic
- quality assurance of models and architectures

Course design

The teaching consists of lectures, classes, supervision and laboratory sessions. Supervision and laboratory sessions focus on practicing BDM theory taught in lectures and classes. The teaching is research based and presents examples from BDM-initiatives from different contexts.

Assessment

The assessment is based on a take-home exam and a group case.

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

- Take-Home Exam, 2.0 cr, grading scale: U-G, individual examination
- Case, 5.5 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

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

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

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

C (Good) 65-74 points/percent. 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 points/percent. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient) 50-54 points/percent. 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 points/percent. 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" and "Informatics: Bachelor Degree Project (Thesis), 15 cr" and further 15 cr informatics/information systems at Bachelor level or the equivalent.

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 advisor for an individual assessment.

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