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 2017-03-24. The revised syllabus applies from 2017-08-29, autumn semester 2017.

General Information
The course can be taken as part of the MSc Programme in Information Systems, or as a separate course.

Language of instruction: English

Main field of studies
Informatics
Information Systems

Depth of study relative to the degree requirements
A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes
The aim of the course is that the student, after having completed 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 decision logic for automation of operational decision-making, can implement this as digital decision-making services and can evaluate the benefits with 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 modeled 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, business agility and system flexibility through separation
between decision logic and process logic in both operational modeling as technical implementation of support systems.

**Knowledge and understanding**
For a pass on the course, the student shall demonstrate knowledge of and understanding of

- the role and significance of operational Business Decision Management (BDM) has in business and information systems and in 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 and information systems and architecture.

**Competence and skills**
For a pass on the course, students shall demonstrate competence and skills individually or in groups to

- identify requirements and design models for simpler Business Process Management (BPM) and operational Business Decisions Management (BDM), using relevant modeling syntax and standards, and tools for separating and connecting decision logic and process logic
- automate decision logic through appropriate models, techniques and tools, as well process this into executable digital decision-making services through specific technology solutions
- use the literature of the course and any other relevant literature to base reasoning and highlighting, discussing and analysing key concepts and phenomena within the course problem area.

**Judgement and approach**
For a pass on the course, students shall 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.

The course includes compulsory components, which are stated in the schedule.

Assessment

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

Re-examinations are offered in close conjunction with the first examination.

Cheating such as plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 8 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.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

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.

F (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 students must have been awarded the grade of E or higher.

Grading rules and definitions

Grades are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or F (Fail) will be applied.
Course grades

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above.

For exams/assignments which are graded and scored, the grades A to F will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to F will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or F (Fail) will not be included in the calculation of the course grade.

Entry requirements

To be admitted to the course, the student must have passed the general requirements and the courses: “Informatics: Introduction to Information Systems, 1-30 cr”, “Information Systems: IS and Business Development, 31-60 cr” and “Informatics: Bachelor Degree Project (Thesis), 15 cr” and further 15 credits informatics/information systems at Bachelor level or the equivalent. English 6/English Course B.

An exception for the general entry requirement in Swedish will be granted when the course is given in English.

Further information

The Director of the MSc Programme in Information Systems has on 9 November 2012 decided that this course may be included in the programme.

The course may not be credited towards a degree together with INFN20 or equivalent courses.

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 his/her 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.

Amendments

2015-06-05: Revised learning outcomes and course content and a new set of exams from Autumn term 2015.
2015-12-04: Added that the course includes compulsory components and that attendance on the introduction meeting is compulsory.

This is a translation of the course syllabus approved in Swedish
Subcourses in INFN50, Information Systems: Business Decision Management

Applies from H17

1701  Take-home exam, 2.0 hp
      Grading scale: Fail, Pass
      Individual exam.
1702  Case, 5.5 hp
      Grading scale: Fail, E, D, C, B, A
      Group case.

Applies from H16

1601  Written exam, 1.5 hp
      Grading scale: Fail, E, D, C, B, A
      Individual exam.
1602  Take-home exam, 1.5 hp
      Grading scale: Fail, Pass
      Individual exam.
1603  Case, 4.5 hp
      Grading scale: Fail, E, D, C, B, A
      Group case.

This is a translation of the course syllabus approved in Swedish