



# IV2007 Enterprise Computing and ERP Systems 7.5 credits

Verksamhets- och affärssystem

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for IV2007 valid from Autumn 2008

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Industrial Management, Information Technology

## Specific prerequisites

For single course students:

Passed course in 2I1100/2I1104/IV1008 "Information systems and database technology" or equivalent.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The overall course goal is to create an understanding of analysis, design and use of intra- and inter-organisational enterprise information systems through the use of enterprise modelling.

This understanding means that the student after completing the course shall be able to:

1. explain and evaluate central concepts in intra and inter organisational enterprise information systems, especially regarding their functionality, architecture, development, use, and consequences
2. analyse and design goal models describing the goals of an organisation and means used for fulfilling the goals
3. analyse and design business and value models for individual organisations as well as networks of organisations with a focus on production, transformation and exchange of resources
4. analyse and design process models including actors, information, control flow, and resource aspects
5. design and evaluate organisations and their business activities as well as information systems using enterprise modelling
6. summarise, apply and evaluate results in recent scientific literature in the area of the course

## Course contents

The course discusses how enterprise information systems support organizations in value chains and supply chains. Different architectures for enterprise information systems are discussed and a main distinction is made between ERP systems and EAI solutions. Organizational consequences of different architectures are discussed. The course introduces a number of modern enterprise modeling techniques based on linguistic instruments and economic ontologies. The course goes deeper into goal modeling, business modeling and process modeling. The course shows how enterprise modeling supports requirements elicitation for enterprise information systems design.

## Course literature

Pavel Hruby: Model-Driven Design Using Business Patterns , Springer, 2006, 35403-01542 -

Paper collection

## Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Written exam 4,5 credits/hp, grading scale A/B/C/D/E/Fx/F

Assignment 3 credits/hp, grading scale: pass/fail (P/F)

## **Other requirements for final grade**

To pass the course, the student needs to pass on both the written exam and the assignment. Final grade is based on the grade of the written exam.

## **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.