

# IV1020 Process Modelling and Design 9.0 credits

#### Processmodellering och design

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

#### **Establishment**

Course syllabus for IV1020 valid from Spring 2009

#### **Grading scale**

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

### **Education cycle**

First cycle

### Main field of study

**Technology** 

## Specific prerequisites

For "single course" students:

• Completed documented upper secondary education incl documented proficiency in English and Swedish.

# Language of instruction

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

#### Intended learning outcomes

The course's overall aim is to provide knowledge and understanding of a specific type of information system, called Workflow Management Systems, WFMS-their role, use and benefit of the organization, architecture and underlying technologies for the realization of the WFMS.

The student is expected to be able to:

- 1st explain and appl ykey concepts for process modeling and design(suchas file, process, activity, role, resource, worklist, push, pull) and details of the reference architecture of the case management system(from Workflow Managemet Coallition, WfMC)and the basic functionality that today's workflow system offers
- develop a process model using a textual domain description
- implement a process model of a WFMS
- analyze given process models with respect to validity, accuracy, and performance
- adapt standard processes(from a process library) to the specific needs

#### Course contents

This course introduces the basics of Workflow Management Systems. It focuses on the modeling of business processes, characteristics of the process management area, and the basic characteristics of modern case management systems.

Workflow Management Systems (also known as process management) is a type of information that is intended to support the administration involved incase of an organization. They are based on workflow technology, which consists of work flows (i.e. processes) within an organization described in graphical models that are fed into a system, which is based on these models supports the coordination of work between the actors involved. Since process management plays a more important role in all businesses and organizations, is knowledge of its underlying systems, their construction and use, relevant to students in information systems area.

#### Disposition

Lecture, tutorials and seminars.

#### **Course literature**

W.van der Aalst and K. van Hee: Workflow Management: Models, Methods, and Systems, The MIT Press, 2002, 0-262-72046-9

#### **Examination**

• INL1 - Assignment, 3.0 credits, grading scale: P, F

• TEN1 - Examination, 6.0 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.

# Other requirements for final grade

Written exam and passed problem assignments

#### **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.