IV1022 System Integration with Enterprise Systems 9.0 credits

Systemintegration med affärssystem

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

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

Establishment

Course syllabus for IV1022 valid from Spring 2009

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B and English corresponding to English A. For students who received/will receive their final school grades after 31 December 2009, there is an additional entry requirement for mathematics as follows: documented proficiency in mathematics corresponding to Mathematics A, and the specific requirements corresponding to Mathematics C, Civics A, Physics A and Chemistry A

Language of instruction

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

Intended learning outcomes

System integration is becoming more important in the engineer's every-day work. Today, there is almost no project that does not pose requirements for integration with other systems. Most of enterprises have, historically, the systems that cannot communicate in a transparent way. Another typical scenario is that an enterprise needs to integrate its systems with other enterprises or organizations.

The aim of this course is to bring in the concepts, methods and techniques needed in solving the problem of system integration. Additionally, the course provides an understanding of the main challenges in system integration nowadays, by giving the students experience in integrating several systems into a single business system.

The goal of this course is to give the student:

- Understanding of system integration from the business perspective

- Knowledge of process and service- oriented integration methods

- Knowledge of the common patterns for system integration.

- Knowledge for creating different integration architectures

- Knowledge of the common techniques for system integration

- Capability to model business processes and information with UML, XML.

- Comprehensive experience in at least one system integration technique

Course contents

The following subjects will be handled during the course:

- Architectures and patterns for system integration.

- Methods for system integration, especially service- and process-oriented methods.

- Techniques and tools for system integration (BizTalk, Oracle, ERP systems, etc.)

- UML

- XML

Course literature

Enterprise Integration: The Essential Guide to Integration Solutions , Beth Gold-Bernstein, William Ruh

Upplaga: Förlag: Addison-Wesley Information Technology Series År:

ISBN: 032122390X

Also:

Course compendium

Lecture slides

Reading articles

Examination

- PRO1 - Assignment, 4.0 credits, grading scale: P, F
- TEN1 - Examination, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercise, 1.5 credits, grading scale: P, 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.

The course examines through a project, exercise and a written exam.

The written exam is graded according to the scale F, Fx, E, D, C, B, and A, and for the project and the exercise F and P are applied

Other requirements for final grade

For the course as a whole, the final grade is based on the grade of exam. A passed project and exercise are also needed.

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.