

# HI1014 Distributed Enterprise Systems 7.5 credits

#### Distribuerade affärssystem

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

#### **Establishment**

Course syllabus for HI1014 valid from Autumn 2007

## **Grading scale**

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

# **Education cycle**

First cycle

## Main field of study

**Technology** 

## Specific prerequisites

Knowledge about object oriented programming and interface programming using Java corresponding to the courses HI1007 Object oriented Programming using Java.

## Language of instruction

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

## Intended learning outcomes

The course goal is to give the student a better understanding in how you develop distributed Internetbased systems. The course will give knowledge in systemarchitecture regarding performance and security.

After the course the student will be able to:

- Explain how to construct server systems in a distributed environment.
- Have knowledge of value and compare different architect and design solutions
- Implement advanced server solutions in J2EE and .NET
- Describe and give example of different techinques used in server development.

For higher degrees one should also be able to

Analyse and compare the system construction based on performance security and structure.

#### Course contents

- Distributed objects (RMI, CORBA)
- MessagingSystems (JMS)
- Enterprise frameworks (J2EE, .NET)
- Webbased systems and programming of thin clients
- Webservices
- Arkitecture and design of dirtibuted applications
- 3-layer architecture
- Transactions
- Concurrency
- Security

### Course literature

Course material

### **Examination**

- RED1 Account, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 Laboratory Work, 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.

# Other requirements for final grade

Final grade, A-F, is based on both the examination and the lab work.

# 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.