



# IV1024 Enterprise Systems and Service Oriented Architecture

## 7.5 credits

**Affärssystem och tjänsteorienterade arkitekturer**

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 IV1024 valid from Autumn 2010

### **Grading scale**

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

### **Education cycle**

First cycle

### **Main field of study**

Technology

### **Specific prerequisites**

The course has a minimum 30 participants, otherwise it will be cancelled.

# Language of instruction

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

## Intended learning outcomes

After the course the student should be able to:

- Define business systems, product-oriented as well as service-oriented.
- Discuss how ERP affect the business.
- Describe how the successful implementation of ERP systems should be planned and organized
- Using ERP to: establish a business, execute industrial processes, record business transactions and generate reports
- Configure and orchestrate basic functions and processes for customer management, order fulfillment, material supply and the economy

In-depth learning

Score E

Define what a business is

Name a number of standard software for business

Describe the activities and financial transactions, along a few critical processes such as order fulfillment and customer management

Using ERP systems in order to: establish a business, execute industrial processes, record business transactions and generate reports.

Score D

Describe the business system life cycle, how chosen, implemented and used in organizations

Describe all critical processes, ie, customer management, order fulfillment, material supply and the economy

Explain the difference between a service and a business system

Score C

Describe different technical architectures for business and explain the pros and cons of various solutions

Describe how an ERP project is organized and the players who usually participate in such projects

Develop a plan for implementation of ERP systems in an organization

Score B

Describe the concept of business systems and explain how it differs from the software called ERP

Discuss about the impact a business has a business / organization.

Describe the risks associated with implementation of ERP systems and suggest measures to minimize these risks

Using ERP systems for more advanced applications

Grade A

Discuss about developments in business such as new technologies and business models

Criticize business systems role in organizations, the advantages and disadvantages

## Course contents

Theory, Labs and a tutorial.

# Disposition

12 lectures, 2 h each

1 introductory lecture for the labs and 5 meetings for reporting laboratory work

## Course literature

Gustaf T. Juell-Skielse: Enterprise Systems and Service Oriented Architectures, Pearson Education Ltd, 2009, 9781847765383

Course compendium in Processes in Business Engineering (digital copy available from First Class)

## Examination

- LAB1 - Laboratory Work, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 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.

Laboratory work and the tutorial are required work, while the exam decides the grade.

## 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.