

# Enterprise Resource Planning Systems: Process and Implementation

Programme course

6 credits

Affärssystem: process och implementering

TDEI13

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Industrial  
Engineering and Logistics

**Date determined**

2017-01-25

## Main field of study

Industrial Engineering and Management

## Course level

Second cycle

## Advancement level

A1X

## Course offered for

- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Computer Science and Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering

## Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

## Prerequisites

Have basic insights in organisation and business administration.

## Intended learning outcomes

The aim of the course is to develop understanding of and present methods for purchasing, implementing and using Enterprise Resource Planning (ERP) systems, both from buying and selling points of view. The course also presents the fundamentals of ERP systems' architecture.

On completion of the course you should:

- understand the meaning of the concept ERP system
- be able to assess challenges and possibilities in selecting, implementing and using information systems
- be able to find and interpret academic articles with relevance for ERP use
- be able to orally and in writing present your own analyses and constructively contribute to and discuss others' analyses.

## Course content

Buying packaged software instead of bespoke systems has become increasingly common the past 15 years. ERP systems today handle a large proportion of the administrative data processing in contemporary organisations. Different types of ERP companies, different systems architectures and strategic market perspectives are presented in the course.

Part 1: Selection and evaluation of business systems. There is an abundance of ERP systems, offering a variety of information support solutions for organisations. The choice of ERP system can have far-reaching consequences for the organisation for many years to come.

Part 2: Implementation. An implementation can take anywhere between weeks and years. This part of the course aims to convey the complications arising in an organisation when changing ERP system. It also deals with challenges from a supplier perspective, for example the assessment of the customer's needs and capabilities.

Part 3: Use. An implemented system will continue to be used for many years. Building on the first two parts of the course, the discussion in part three deals with the mutual influence between the users, the ERP system and the activities which the use is intended to support. An important aspect of use is how ERP systems affect - and enable - change and development of the organisation's accounting and control systems, for example through easy access to non-monetary key indicators. A number of teaching cases will be analysed and discussed.

## Teaching and working methods

The course starts with a number of lectures and seminars, and discussions of the projects carried out in small groups. A written test on the course literature takes place during the first half of the course. During the second half, the emphasis is on case discussions - based on both case studies performed by others and on the projects the participants are carrying out. The course builds on the active participation of the students. Swedish business systems enterprises and purchasing companies participate in the course.

## Examination

|      |                     |           |            |
|------|---------------------|-----------|------------|
| UPG2 | Participation       | 1 credits | U, G       |
| UPG1 | Written examination | 2 credits | U, 3, 4, 5 |
| PRA1 | Project             | 3 credits | U, 3, 4, 5 |

Literature test. Projects conducted in small groups, and with themes chosen by the groups in consultation with the examiner, presented in writing and discussed at seminars. To pass the course, participants need to have actively participated in seminars, completed reflection reports concerning course literature and teaching cases, duly prepared have participated in discussions of course literature, teaching cases and the work performed by other work groups, and actively have contributed to a completed project that has been presented in writing and orally in line with the directions given during the course.

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Department

Institutionen för ekonomisk och industriell utveckling

## Director of Studies or equivalent

Johan Holtström

## Examiner

Alf Westelius

## Course website and other links

[http://www.iei.liu.se/indek/utbildning/ekonomiska-informationssystem/tdei13?  
l=sy](http://www.iei.liu.se/indek/utbildning/ekonomiska-informationssystem/tdei13?l=sy)

## Education components

Preliminary scheduled hours: 46 h

Recommended self-study hours: 114 h

## Course literature

### Additional literature

#### Articles

Current academic articles and reports.

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).