Technical, Economic and Societal Evaluation of IT-products

Programme course

6 credits

Teknisk, ekonomisk och samhällelig utvärdering av IT-produkter

TDDC34

Valid from: 2021 Spring semester

Determined by
Board of Studies for Computer Science and Media Technology

Date determined
2020-09-29

Main field of study

Information Technology, Computer Science and Engineering, Computer Science

Course level

Second cycle

Advancement level

A1X

Course offered for

- Master's Programme in Computer Science
- Master of Science in Computer Science and Engineering
- Master of Science in Information Technology
- Master of Science in Computer Science and Software Engineering
- Computer Science and Engineering, M Sc in Engineering
- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering

Prerequisites

Introduction to programming datastructures and algorithms, computer science, at least 45 credits. Basic course in industrial economics..

Intended learning outcomes

The aim of this course is to provide a holistic perspective on models and methods to analyze and evaluate new technology and its alternatives as well as its economical and socio- technical effects. After the course, students should be well equipped to take part in discussions about how to evaluate and analyze the impact and possibilities of new IT ventures.

Course content

This course takes you through theories and techniques to evaluate and analyze IT-ventures and/or innovative IT-based applications from a socio-technical perspective. Based on current trends, we focus on the importance, the impacts and the potential effects of existing technology. The ambitious is to show how evaluations models can be used to analyze the effects of new technology for users, enterprises, organizations and the society as a whole, as well as the incentives needed to realize the latent utility of technology.

A project report is developed during this course. In the report students analyze and evaluate the economic, organizational as well as the technical aspects, effects and consequences of the implementation and use of state of the art IT-ventures.

The participants' projects, their literature searches, and the exchange of knowledge between the workgroups form a central part of this course. The role of the teachers is to give an overview of the areas involved, to give support and supervision to produce a god project, and to organize the course in a manner that support the students´ learning process.
Course literature:

Teaching and working methods

The course contains lectures and seminars – in the classroom and a project. The seminaries are related to the literature in use and are conducted by participants. Most of the teaching is concentrated into 4-hour modules where we mix lectures, seminaries, and discussions of literature.
A project report is developed during this course. In the project students analyze and evaluate the economic, organizational as well as the technical aspects, effects and consequences of the implementation and use of state of the art IT ventures. The results of the project are presented in a final seminary .The interaction between workgroups during the final seminary form central parts of the course.

Examination

UPG2	Project	U, 3, 4, 5	3 credits
UPG3	Seminars	U, G	3 credits

Grades

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

Other information

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is Swedish, the course as a whole or in large parts, is taught in Swedish. Please note that although teaching language is Swedish, parts of the course could be given in English. Examination language is Swedish.
- If teaching language is Swedish/English, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English (depending on teaching language).
- If teaching language is English, the course as a whole is taught in English. Examination language is English.

Other

The course is conducted in a manner where both men's and women's experience and knowledge are made visible and developed.

The planning and implementation of a course should correspond to the course syllabus. The course evaluation should therefore be conducted with the course syllabus as a starting point.

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Johan Holtström

Examiner

Thomas Rosenfall

Course website and other links

http://www.iei.liu.se/indek/utbildning/ekonomiska-informationssystem/technical-economical-and-societial-evaluation-of-it-products?l=sv

Education components

Preliminary scheduled hours: 48 h
Recommended self-study hours: 112 h

Course literature

Fastställs senare

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.