

Interactive Products

Programme course

6 credits

Interaktiva produkter

TDDD90

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical
Engineering and Design

Date determined
2017-01-25

Main field of study

Computer Science and Engineering, Product Development

Course level

Second cycle

Advancement level

A1X

Course offered for

- Design and Product Development

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

User-centred design at basic level (courses like System Usability Issues, Interaction Design, Interactive Systems, User Driven Product Development or Product Ergonomics, or Create and Understand 3D), and programming at basic level (courses like Object Oriented Programming, Functional Programming, Imperative Programming or Introduction to Programming) are required prerequisites.

Intended learning outcomes

The student shall develop advanced knowledge in methods and theory for interaction design. After the course, the student shall be able to:

- Use methods and techniques for concept design and detailed design to define problems and alternative solutions for digital interactive products and services.
- Give an account of system objectives, and analyse design qualities and user experience for digital interactive products and services.
- Define purpose, content, and form for digital interactive products and services.
- Argue for one's interaction design ideas using multimedia, visualisations, or oral and written presentation.
- Summarise and analyse the meaning of concepts from interaction design and use them to analyse design work.

Course content

The students of this course develop advanced methodological and theoretical knowledge in design of digital interactive products and services. Design methods and reflection and criticism supported by theory is mixed with practical creative design work, sketching, prototyping and testing. The personal responsibility for one's design work in relation to constraints is discussed, as well as the designer's responsibility in society, and the possibility of innovation through active design strategy.

Teaching and working methods

The course circles around a sequence of assignments and design work that are concluded with seminars and examination sessions. Individual feedback on design work is given to support students' development beyond the basic level. Lectures are primarily used to introduce new areas. Some sessions are mandatory.

Examination

UPG2	Individual Assignment	3 credits	U, 3, 4, 5
UPG1	Group Assignment	3 credits	U, G

Design process, product and analysis are considered in the examination. Conscious and well-motivated assessments, choices and syntheses of methods, problems, and solutions are rewarded. Distinction is evaluated in terms of analytical and creative excellence.

Grades

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

Department

Institutionen för datavetenskap

Director of Studies or equivalent

Jalal Maleki

Examiner

Johan Blomkvist

Course website and other links

Education components

Preliminary scheduled hours: 32 h

Recommended self-study hours: 128 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://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.