Linnæus University

Jnr: FAK 2011/538

Programme syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

Interaktionsdesigner, 180 högskolepoäng
Interaction Designer, 180 credits

Level
First Level

Establishment of Programme
Established by Organisational Committee 2009-03-26

Date of Ratification
Approved by Committee for First and Second Cycle under the Faculty Board of Science and Engineering 2009-03-26
The programme syllabus is valid from autumn semester 2012

Revised 2012-02-23

Prerequisites
General entry requirements and Mathematics 2a / 2b / 2c or English B, Mathematics B (Field-specific entry requirements 4/A4). Basic eligibility and English B, Mathematics B

Description of Programme

The programme aims to give students a comprehensive knowledge of evaluation, development and design of technological artifacts from a user centered design perspective.

The students learn to work according to a multidisciplinary design perspective and then apply this process in different interactive systems, both digital and physical. The interaction designer should be able to work comprehensively and have a holistic view of digital and physical product development. She should also have broad skills in design and construction as well as deep knowledge of informatics, interaction design as a profession as well as deep knowledge of product development from a user centered design perspective.

The interaction designer, as a profession, evaluates and customizes user interfaces of digital and physical artifacts. This is done through a user centered design perspective. Design and interaction is communicated both in writing and visually to different related professional groups during implementation.

Objectives

Knowledge and understanding
For a Degree of Bachelor students must

- demonstrate knowledge and understanding in their main field of study, including knowledge of the scientific basis of the field, knowledge of applicable methods in the field, in-depth knowledge of some part of the field and a general sense of current research issues.

Skills and abilities
For a Degree of Bachelor students must

- demonstrate an ability to seek, gather and critically interpret information that is relevant to a problem and to critically discuss phenomena, issues and situations;
- demonstrate an ability to independently identify, formulate and solve problems and to perform tasks within specified time limits;
- demonstrate an ability to present and discuss information, problems and solutions in dialogue with different groups, orally and in writing; and
- demonstrate the skills required to work independently in the field that the education concerns.

Judgement and approach
For a Degree of Bachelor students must

- demonstrate an ability to make assessments in their main field of study, taking into account relevant scientific, social and ethical aspects;
- demonstrate insight into the role of knowledge in society and into people's responsibility for how knowledge is used; and
- demonstrate an ability to identify their need of further knowledge and to upgrade their capabilities

Programmeme Specific Goals
In order that reflects the progression of the programme, the student must:

- have a good knowledge of central theories and approaches within interaction design in general and the chosen profile area in particular
- be able to practically apply theories and methods used professionally within interaction design
- be able to independently search for, collect, evaluate and interpret relevant information concerning a problem formulation
- be able to independently identify, formulate and solve problems by using a critical approach
- be able to present and communicate the results to different target groups both in writing and orally
- be able to work in multidisciplinary teams to plan, implement and evaluate development projects in a given time frame
- be able to test, evaluate and implement usability on existing systems and products
- in connection with the degree project be able to demonstrate an ability to follow development of knowledge in the subject area, demonstrate the ability to independently search and evaluate knowledge on a scientific level and to exchange this knowledge and experience with people lacking specialist knowledge of the field.

Content

Programme overview
The programme has a programme coordinator who ensures that the quality and an acceptable progression and who also ensures a good line of communication between teachers and students. Quality and progression is upheld through a continuous dialogue with the Subject Representative.

Programme councils are held at least three times every academic year. The programme coordinator, at least one student representative from each year, lecturers teaching within the programme as well as other stakeholders are invited to these councils.

Some parts of the programme are given within the field of design.

The programme interaction design is a multidisciplinary educational programme of 180 credits which leads to a bachelor's degree within the main field of informatics. The main field informatics consists of studies of at least 90 credits, including at least 30 credits at G2 level.

The programme will give students a good understanding of the subject of informatics, with deep knowledge and skills in interaction design.

To integrate the different areas of knowledge, the students extensively work in projects and according to certain themes. In the degree subject, at least 30 credits have a progression similar to level G2. Students are given the opportunity to deepen their knowledge and skills and specialize in some profile areas through projects and partnerships with the industry. Current approaches may be human – computer interaction, interactive media, 3D visualization, evaluation of interactive systems, programming or industrial design. The programme also provides insight into the professional role through work methodology in conjunction with business projects and discussions in seminar form which is a major part of most of the courses within the programme. The user's needs and goals and learning relevant methods to ensure that these are taken into consideration when designing are central aspects of the programme, regardless of the chosen profile area. Besides this, the student chooses courses from what is offered within the programme and from their own area of interests. It is also possible to choose other courses during the last year. This is done in consultation with the programme coordinator. The requirements for the Bachelor of Information Technology must be met to obtain a degree.

There are many occasions during the programme when theory, practice and methodology are mixed and the courses can than be themed. The theoretical studies help to provide structure and insight while the more practical elements provide a basis for processing, analysis, reflection and discussion. The students are trained in actively seeking knowledge, critical thinking and problem solving. A connection to contemporary research and new knowledge within the field is taken into consideration during all stages of the programme.

Programme Courses

Year 1

Subject introduktion to interaction design 15 credits, Informatics, G1N, Mandatory*

Basic knowledge of the subject area of informatics, interaction design as a subject and profession as well as introduction to philosophy of science.

Graphical tools 7,5 credits, Media technology, G1N, Mandatory*

Introduction to production of bitmap- and vectorbased graphics.

Client side web development 7,5 credits, Computer science, G1N, Mandatory*

Construction of web pages using XHTML/CSS and javascript.

Interaction design methods I 15 credits, Informatics, G1F, Mandatory*

Basic knowledge of different types of business analyses as well as deep knowledge in project management in IT and professions specific methods for interaction design.

Design- and conceptvisualization 7,5 credits, Informatics, G1F, Mandatory*
Basic course in visualization of graphical elements with practical application towards user interface design.

Web management 7,5 credits, G1N, Computer science, Mandatory*
Basic course in PHP with pratical application in the web publication tool wordpress.

Year 2
User centered design 15 credits, Informatics, G1F, Mandatory*
Advanced course in user oriented design concernings subjects such as service science, CSCW and participatory design.

Graphic design 7,5 credits, Design, G1N, Mandatory*
Basic course in graphic design containing areas concerning perception, graphic design, typography and image analysis.

Designing graphical interfaces 7,5 credits, Media technology, G1F, Mandatory*
Advanced course within design of graphical user interfaces with focus on production of graphical material as well as typical activities of an interaction designer.

Interaction design methods II 15 credits, Informatics, G1F, Mandatory*
Advanced course concernings methods for creating user centered systems and user interfaces with an extra focus on product design.

Applied interaction design 15 credits, Informatics, G1F. Mandatory*
Advanced course in service science with practical application towards the business.

Year 3

Project Work and Philosophy of Science, 15 credits, Informatics, G2F, Mandatory*
Basic course in philosophy of science with pratical application towards the interaction design business area.

Degree project in Informatics, 15 credits, Informatics, G2E, Mandatory*
Carrying through of a bachelor thesis in informatics.

*Courses within the main subject of Informatics.

Detailed descriptions of the courses are given in separate course syllabuses. The sequence in which courses are provided may change from the outline given above.

Work Experience
The students are prepared from the very beginning of their upcoming working life by training in communication, cognition, evaluation, project management, leadership, entrepreneurship and group dynamics. The students gain a full perspective and insight into how theory and practice are interrelated and they are given the opportunity to consolidate these skills in their upcoming working life through continuously establishing the main subject of informatics and seminars within each course and throughout the programme.

During the programme several projects are carried out in conjunction with the trade and industry on both G1 and G2 level. This gives the students a good insight into how it is to work within their area of expertise as well as giving them valuable references for future use.

Studies Abroad
Studying abroad is seen as an important addition and a great opportunity for students to further develop themselves and their skills. The programme allows for study abroad during the fall semester of the third and final year.

Studying abroad requires at least 60 credits. The courses that are studied abroad should be equal to or highly relevant for the programme profile. These can be courses that either broaden or deepend the standard selection of courses.

Scope of the Programme
The programme deals with sustainable development and this is done by making sure that the programme content is up to date, as well as making sure that the historical development of the field is included. This leads to students with knowledge, which will be relevant as well as applicable over a longer period of time. The term sustainable development hence aims to regard man and his needs and how one through technology can make sure that these are taken into consideration even in the future.

Great effort is taken to ensure that gender and diversity is taken into consideration through out the programme since an interaction designer should be able to understand and design for a large variety of people regardless of social, religious or cultural background.

Internationalization is also an important part of the programme. This is mostly accomplished by giving the students the opportunity to work with students from other universities or to study abroad themselves, but also by gaining inspiration and knowledge of how other universities are engaged in international teaching. Additional focus in terms of this is spent on teaching and examination through distance learning.

Quality Development
Continuous evaluation and improvement of the program is done through course evaluations, in consultation with students in the form of programme committee, through academic evaluations, through collaboration with businesses and other stakeholders, and by benchmarking against other Universities.

Degree Certificate
After completing programme studies, corresponding to the requirements expressed in the Higher Education Ordinance Degree Ordinance as well as Linnaeus University Local Degree Ordinance, the student may apply for a degree. Those who have successfully completed the programme Interaction Design 180 credits can receive the following degree:

Filosofie kandidatexamen med inriktning mot interaktionsdesign
(Huvudområde: Informatik)
Bachelor of Science with specialization in interaction design (Main field of study: Informatics)

The degree certificate is bilingual (in Swedish/English). The Degree Certificate is accompanied by a Diploma Supplement (in English).