Linnæus University

Jnr: HL/2009-0209

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 Organisational Committee 2009-10-12
The programme syllabus is valid from autumn semester 2010

Prerequisites
Basic eligibility and English B, Mathematics B (Field-specific entry requirement 4 with the exception of Mathematics C and Social Studies A).

Description of Programme

The programme aims to give students a comprehensive knowledge of usability and development of technological artifacts with the human user and his/her needs in focus.

The students learn to work according to the design process and then apply this process in different interactive technology systems, both physical and digital. The interaction designer should be able to work comprehensively, have a holistic view of digital and physical product development, have broad skills in design and construction as well as deep knowledge of usability and informatics.

The interaction designer should be able to cooperate with other technicians and designers but in this cooperation focus on functionality and usability. The professional role is to participate in the technical development through designing good usability in modern technological artifacts and systems.

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
For a Bachelor degree 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 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 timely manner
- be able to implement usability on existing systems and products
- in connection with the bachelors thesis 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

Organization
The programme has a programme coordinator who ensures that the quality and an acceptable progression and who also sees to it that there is a good line of communication between teachers and students. Quality and progression is upheld through a continuous dialogue with the Head of Subject.

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.

Programme overview
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.

There are many occasions during the programme when theory, practice and methodology are mixed. 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

Introduction to interaction design, 7,5 credits, Informatics, G1N, Mandatory*
Applied Computer Graphics, 7,5 credits, Media Techonology, G1N, Mandatory
Graphic Design, 7,5 credits, Design, G1N, Mandatory
Human – Computer Interaction, 7,5 credits, Informatics, G1N, Mandatory*
Project Management, 7,5 credits, Informatics, G1N, Mandatory*
Communication and Cognition, 7,5 credits, Informatics, G1N, Mandatory*
Database Engineering, 15 credits, Informatics, G1F, Mandatory*

Year 2

Colour and Shape, 7,5 credits, Design, G1F, Mandatory
Visualization in 3D, 7,5 credits, Informatics, G1N, Mandatory*
Applied Visualization, 7,5 credits, Informatics, G1F, Mandatory*
Computer Aided Design, 7,5 credits, Informatics, G1N, Mandatory*
Design Methods and Design Processes, 7,5 credits, Design, G1F, Mandatory
Design Methods, In-depth Study, 7,5 credits, Design, G1F, Mandatory
Design Project, 7,5 credits, Design, G1F, Mandatory
Computer Mediated Communication, 7,5 credits, Informatics, G1F, Mandatory*

Year 3

Appliced Interaction Design, 15 credits, Informatics, G1F*
Optional Courses, 15 credits, G1F/G2F
Project Work and Philosophy of Science, 15 credits, Informatics, G2F, Mandatory*
Bathelor Thesis in Informatics, 15 credits, Informatics, G2E, Mandatory*

*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 continuous anchoring of the main subject of informatics and seminars within each course and throughout the programme.

During the programme taken 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 what it is like working 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
Sustainable development through the programme is achieved through making sure that the programme content is contemporary, 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 all through 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 regarding this is also placed on distance teaching, education and examination.

Quality Development
Continuous evaluation and improvement of the programme is done 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
(Huvudområde: Informatik)
Bachelors Degree
(Main field of study: Informatics)

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

Other Information

For the student to be admitted to further studies within the programme the following requirements for totals of completed higher education credits have to be met:

- To be admitted to the second year of studies the students need at least 45 credits from the first year in total.
- To be admitted to the third year, and to be admitted to courses with a progression of G2 level, at least 90 credits from year one and two are required.