Master Programme (One Year) in Informatics
Magisterutbildning i informatik
60 credits

Ladok Code: NAINF
Version: 1.1
Level: Second cycle
Approved by: Board of the department 2010-02-18
Valid from: Spring 2010
Valid for:

General Objectives

Second level education shall essentially build on the knowledge that students acquire in first level education or corresponding knowledge. Second level education shall involve a deepening of knowledge, skills and abilities relative to first level education and, in addition to what applies to first level education, shall

- further develop the students' ability to independently integrate and use knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable independence or for research and development work.

(The Higher Educations Act, Chapter 1, Section 9)

Objectives

The overall objective of the Master's Program in Informatics is that students will develop advanced knowledge and skills in in the discipline of Informatics. In addition, the student will develop an ability to systematically and well-founded handle complex problems associated with the development and use of IT in businesses.

Upon completion of the program the student should have acquired in-depth knowledge and skills in systems science to develop effective system solutions. In order to create such solutions a good understanding of the interplay between context and system is required. The role as a systems developer therefore requires knowledge from many different areas. The goal of the program is that students should aquire advanced knowledge in business, information technology and system design along with a thorough knowledge of systems development.

Those students who have undergone this program will in their professional capacity be key figures in the process of linking IT and system solutions to their specific contexts. Students will thus have acquired a good design ability in several different areas.

Knowledge and understanding
Upon completion of the program, the student is expected to be able to

- write and orally discuss theories related to informatics as science with students and researchers in the field,
- communicate knowledge about informatics as a scientific field to both practitioners in the field, and to people without specialist knowledge in the field,
- explain and discuss the various principles and methods of business and systems analysis,
- explain and discuss the various principles and methods of business and system design,
- explain and discuss the various principles and methods of business and systems development,
- describe an information system's role in various types of activities, as well as explain how IT can be used to create business advantages.

Skills and abilities
Upon completion of the program, the student is expected to be able to

- independently carry out and report a short scientific study in informatics,
- critically analyze and assess research-related texts in informatics,

- integrate knowledge of systems and business development, to critically reflect on the effects that may occur when the IT-based systems are introduced into an organisation,
- formulate and analyze systems and business models,
- analyze, evaluate and apply methods and techniques of systems and organizational development,

Evaluation ability and attitude

Upon completion of the program, the student is expected to be able to
- demonstrate a thorough understanding of the characteristics of computer systems that overcomes the difficulties that might arise in the interaction between man, computer and business
- demonstrate an understanding of the consequences flawed design solutions can have on business efficiency,
- demonstrate a thorough understanding of how individuals, businesses, organizations and society can be affected by business and system design

Content

The program is carried out in one year and builds on the knowledge students acquired in informatics at the basic level. The main focus of the program is based on courses mainly in the fields of business, systems and IT design.

The education is based on the student reading 60 ECTS in courses in Informatics, including 45 ECTS that must be on advanced level.

Required course in the program is:
- Independent work for master's degree in informatics (15 ECTS)

Other courses are elective. Examples of courses at the advanced level that may be included:
- Human Information Systems (7.5 ECTS)
- Consequences of IT in Business (7.5 ECTS)
- Information Systems and Business Processes (7.5 ECTS)
- System Development Philosophies (7.5 ECTS)
- Thesis for Master's Degree in Informatics,(15 ECTS)

Other courses are optional.

Admission Requirements

Bachelor's degree in informatics. Verified knowledge of English corresponding to the course *English B* in the Swedish Upper Secondary School *or* a Bachelor Degree from a university in Sweden, Denmark, Norway, Finland or Iceland. For further information about English language profiency, please view: http://www.hb.se/wps/portal/engtest

Degree

Master's (One Year) degree in informatics.

Degree certificates are issued upon application on a special form. More information is available at www.hb.se.

Student Influence and Evaluation

Course and program evaluation is an integral part of the education and is in accordance with established policy of evaluation. Course evaluation is carried out after completion of each course, while program evaluation occurs before the completion of the program, where the students get the opportunity to value their education as a whole. Evaluation results are a useful starting point for further course and program development and, together with the continuous improvement of evaluation procedures, an important part of quality development.

Miscellaneous

Teaching is normally in English. The course literature is in English.

The training is mainly organized on campus, with elements of some courses that support flexible learning.

The program provides national and international co-operation with relevant courses from other institutions for higher education after individual agreement / assessment on the student's request.