UPPSALA UNIVERSITET

Translation of Curriculum Statement for Graduate Level (Third-level) Education

Computer Science with specialization in Database Technology

Swedish title: Datavetenskap med inriktning mot databasteknik

TNDAVE04

Swedish Curriculum adopted by the Board of the Faculty of Science and Technology (Board for Third-level Education) on 2008-07-02. Translation approved on 2010-08-10.

The Curriculum Statement for Third-level Education consists of three parts: a general part, this subject specialized curriculum statement, and each doctoral student's individual study plan.

Objective

The education shall, starting at the basic education for the subject area, give further insights in the important parts of Computer Science and deep knowledge in the specialization of Database Technology. This includes training in research methodology, along with good insights in the presentation of problems that exist in the research area and its applications. Through supervision and thesis writing the doctoral student should become well prepared to critically and independently plan, execute, and present orally and in writing research and development projects of high international quality.

The doctoral student shall also be able to present her/his own goals and results orally and in writing to different target groups in English and, in the case of Swedish-speaking doctoral students, in Swedish.

Subject description

Computer Science with specialization in Database Technology includes theory and experimental methodology for building computer based system for managing large volumes of data. The subject is a specialization of Computer Science.

Central to the subject is to develop and analyze, from both theoretical and practical points of view, concepts, languages, programs, and

methods for describing, storing, distributing, searching, or doing other kinds of processing of large data volumes, aiming at making the availability of these data simple, efficient, reliable, safe, and adaptable for new application areas.

Eligibility

Basic Eligibility

The basic eligibility for third level education is described in the general part of the curriculum statement.

Special Eligibility

Special qualification to education at research level in Computer Science with specialization in Database Technology is granted to persons who have passed examination in courses Computer Science or for the area of Database Technology relevant courses, covering at least 90 higher education credits. Of these, at least 15 higher education credits must be within courses close to the area of Database Technology. Persons who have acquired corresponding knowledge outside Sweden are also qualified.

Admission

Applicants for third level program in Computer Science with specialization in Database Technology must submit an application to the head of the Department of Information Technology. Admissions to places in third level programs take place normally several times per year.

In connection with the admission it must be stated how it is planned to finance both the personal maintenance of the doctoral student, and her/his research.

Program structure

The third level program includes experimental and theoretical courses, literature studies, and seminars as well as research work leading to a dissertation.

In connection with the admission, each doctoral student and her/his supervisor shall draw up an individual study plan after consultation with the professor in charge of the third level program. The plan is to be approved by the head of the department (by delegation of the Faculty Board), in connection with the admission.

The individual study plan shall be reviewed jointly by the doctoral student and her/his supervisor, annually, and be provided with a summary of the achieved results and the plans for the coming year. Significant changes and any disagreement on the individual study plan shall be reported to the head of the department or, if deemed necessary, to the Board for Third-level Education.

Courses

The courses are intended to provide wider insights into the subject as a complement to the specialist competence acquired in the research work. The courses included in the individual study plan may partly be selected among Computer Science, Mathematics, Engineering and other fields relevant for the intended dissertation subject. Furthermore, a person employed as doctoral student normally has some departmental duties regarding education, research, and administrative work.

A PhD degree should include courses corresponding to normally 60-90 higher education credits. The exact number of credits is specified in the individual study plan. A Licentiate degree should include courses corresponding to 30 higher education points.

For a PhD degree at least 15 higher education credits should be for graduate level courses within the area of Computer Science. In addition to these points, at least 15 higher education credits should be individual specialization courses within the area of Database Technology or the application area where the student individually specializes in material connected to his/her own dissertation work.

Courses from graduate level education can be credited if they are deemed relevant for the subject of the student's research area.

Courses among those used for special eligibility cannot be included in the individual study plan.

The range of courses offered is revised continuously.

Requirements for doctoral degree

The requirements for doctoral degree consist of on one hand passed examinations in the courses included in the approved individual study plan of each doctoral student, and on other hand passed public defense

of the doctoral thesis. The program leading to the doctoral degree amounts to 240 higher education credits (four years of full-time studies), of which the thesis part amounts to a minimum of 120 higher education credits and the course part to a minimum of 60 higher education credits.

Requirements for licentiate degree

A stage of at least 120 higher education credits (two years of full-time studies) in the third level program may be completed with a licentiate degree. The requirements for this are that the doctoral student both has passed the examinations included in the program stage and has got an academic paper amounting to a minimum of 60 higher education credits passed. The course part amounts to a minimum of 30 higher education credits.

Other

Research in Computer Science with specialization in Database Technology is conducted within a wide international and interdisciplinary cooperation and requires a substantial international flow of information. It is necessary that the graduate student can understand and write texts in English.