Translation of Subject Curriculum (Study Plan) for Third-cycle (PhD) Education

Chemistry with specialisation in Analytical Chemistry

Swedish title: Kemi med inriktning mot analytisk kemi

TNKEMI01

Swedish curriculum adopted by the Board of the Faculty of Science and Technology (Third-cycle Educational Board) on 2014-11-19

The Study Plan for third-cycle studies consists of three parts: a general part, this subject specific study plan, and each doctoral student's individual study plan.

Objective

Building on the basic education, the third-cycle studies are expected to provide further insight into the most important areas of the subject, as well as in-depth knowledge within at least one subdivision. Through tutoring, research and thesis work, the doctoral student shall be well prepared for critical and independent research, or for other professional activities with high demands on topic insight and research skills.

The doctoral student shall also be able to present her/his 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

Analytical chemistry is based on current analytical problems and deals with the theories and experiments needed to solve these problems. The subject includes development of new and improved principles, methods and techniques for the weakest link in specific analytical issues.
Eligibility

Basic Eligibility
The basic eligibility for third-cycle (PhD) studies is described in the general part of the study plan.

Special Eligibility
Special eligibility to third-cycle (PhD) studies in Analytical Chemistry requires that the graduate has passed courses in chemistry, or courses in areas relevant to analytical chemistry, of at least 90 credits or that he/she has acquired equivalent knowledge abroad.

Anyone who wants to be adopted for third-cycle (PhD) studies, but lacks some of the prerequisites, can invoke this as grounds for priority application to the additional training.

Admission
Applicants for third-cycle studies in Analytical Chemistry are encouraged to submit their application for a specific vacant position through the university website (www.uu.se). All vacancies for PhD-studies are announced here.

At the time of admission, the department must provide a financial assistance plan demonstrating sufficient support to cover the maintenance of the applicant as well as her/his research.

Program structure
At the time of admission, each doctoral student and her/his supervisor shall draw up an individual study plan after consultation with the professor in charge of third-cycle (PhD) studies. The plan is to be approved by the Head of the Department (by delegation of the Faculty Board) at the time of admission.

The individual study plan shall be reviewed annually by the doctoral student, her/his supervisor and the department’s director of PhD-studies jointly. The study plan shall be supplemented with a summary of the achieved results and the plans for the coming year. Significant changes as well as any disagreement on the individual study plan shall be reported to the Head of the Department or, if deemed necessary, to the third-cycle (PhD) Educational Board.
Courses
The third-cycle (PhD) studies may include different kinds of courses, such as lectures, literature studies, practical training, field studies, etc. The courses are intended to provide a wider insight into the subject as a complement to the in-depth competence acquired during research.

The courses included in the individual study plan may be selected among freestanding courses in areas that strengthen the student's individual level of competence. Courses can also be selected from a private, national or international range of postgraduate courses.

A course in research ethics (of at least 2 higher education credits) is mandatory for licentiate and doctoral degree, as well as university educational theory for doctoral students who teach at basic or advanced level.

Requirements for doctoral degree
The requirements for the doctoral degree consist of passed examinations in the courses included in the approved individual study plan of each doctoral student, as well as a passed public defence of the doctoral thesis. The studies awarded a doctoral degree comprise 240 higher education credits (four years of full-time studies), of which the doctoral thesis comprises a minimum of 120 higher education credits and the course part a minimum of 40 higher education credits.

Requirements for licentiate degree
A doctoral student who has acquired at least 120 higher education credits (two years of full-time studies) is eligible for a licentiate degree. The requirements consist of passing the examinations included in the program stage and receiving a passing grade on an academic paper of at least 60 higher education credits. Courses passed should amount to a minimum of 20 higher education credits.

Other
Research in Analytical Chemistry takes place within the context of extensive international collaboration and requires a comprehensive global information flow. It is essential that the student apprehend, for the subject relevant, texts in English.