

# Education plan

for

**Master's Programme in Analytical Chemistry**  
**Masterprogram i analytisk kemi**

**120.0 Higher Education**  
**Credits**  
**120.0 ECTS credits**

<b>Programme code:</b>	NANKO
<b>Valid from:</b>	Autumn 2007
<b>Date of approval:</b>	2006-10-18
<b>Department:</b>	Department of Materials and Environmental Chemistry

## Decision

### Prerequisites and special admittance requirements

Bachelor's Degree in Chemistry. English B/English 6 (from Swedish upper secondary education or equal).

### Programme structure

Analytical Chemistry is the discipline in chemistry focusing on identification and quantification of chemical compounds. Analytical Chemistry involves all the topics of the "Analytical Chain" ranging from sampling strategy to the final reporting of data. This includes areas such as analytical methodology, techniques for sampling, separation and spectroscopic methods, instrumental techniques, handling, processing and evaluation of data, etc. The Master programme in Analytical Chemistry is connected to the various prominent research areas at the Department of Analytical Chemistry of which some are internationally highly recognized. The Department is the largest Department of Analytical Chemistry in Sweden. The research profile includes ambient air, indoor air, particle analysis, exhaust emissions, work environments, environmental analysis, proteomics, multivariate data analysis, theoretical chromatography etc. Further information is available at the Department's home page. [www.anchem.su.se](http://www.anchem.su.se)

The master programme consists of compulsory advanced courses in analytical chemistry of totally 90 credits, one elective course of 15 credits from a specified list and one freely elective course of 15 credits.

Of the compulsory advanced courses in analytical chemistry comprises of at least 45 credits as a Degree project in Analytical chemistry. The Degree project for the student focuses on performing independent research within a research group at the Department or in the industry. It also includes oral presentations and the writing of a scientific report. The Degree project prepares the student for a professional career in industry, academia or other activities in the society. The Degree project finalizes the Master in Analytical chemistry.

The Masters programme in Analytical Chemistry is open for Swedish as well as international students and all courses within the programme will be given in English if required.

The Masters programme in Analytical Chemistry is organized by the Department of Analytical Chemistry.

## Goals

## **Courses**

Compulsory advanced courses

Masspektrometri (15hp)

Bioanalytisk kemi (15hp)

Kemometri (15hp)

Analytisk kemi, självständigt arbete (45hp)

Elective courses of which at least one must be chosen

Analytisk kemi II (15hp)\*

Organisk kemi II (15hp)

Miljö kemi I (15hp)

Miljö kemi II (15hp)

Biokemi II, Proteiner från gen till funktion (15hp)

One freely elective course of maximum 15 hp

Sammanlagt får högst 30 hp kurser från grundnivå väljas inom programmet.

\*Kursen Analytisk kemi II är obligatorisk för dem som inte läst den inom sin kandidatexamen.

## **Degree**

Master in Analytical Chemistry