KA103X Degree Project in Engineering Chemistry, First Cycle 15.0 credits

Examensarbete inom Teknisk kemi, grundnivå

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for KA103X valid from Autumn 2015

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

General entry requirements and Mathematics E, Physics B and Chemistry A and 120 credits within the Degree Programme in Engineering Chemistry.

To apply for an independent study (**kandidatexamensarbete)** starting in period 3 it is required that a main part of the studies, at least 105 credits (of which total 90 credits from school year 1 and 2, of which at least 50 credits from school year 1) of the compulsory courses

in the engineering programme in chemical science/technical chemistry should be completed latest after period 1 in school year 3.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

1. Show knowledge of the disciplinary foundation of the chosen subject area, applicable methods and orientation in current research and development and show advanced knowledge within some part of the subject area.

2. Demonstrate the ability to search, collect and use relevant information critically and identify the need for additional knowledge.

3. Demonstrate the ability to formulate, assess and handle problems and critically discuss phenomena, issues and situations.

4. Demonstrate the ability to plan, and with applicable methods, carry out assignments within given time frames.

5. After dialogue with different groups demonstrate the ability to orally and in writing account for and discuss information, problems and solutions.

6. Demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects.

7. show the skills required to work independently within some part of the main field of technology

8. Orally and in writing present results in Swedish, discuss conclusions and clearly refer to the knowledge that it is based on.

Course contents

The student should work with a current research or development project, which includes posing problems that can give specialisation/broadening within chemistry and chemical engineering. The project will present opportunities for information retrieval, practical work, and report writing. Then the project is carried out in groups including also lectures and reflections around preconditions for modern leadership. Within the framework for the projects, one should identify and develop a business plan that includes sustainable business development.

Each project group has a supervisor.

Course literature

Scientific articles

Examination

- XUPP - Examination Question, 15.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Written report, oral presentation and critical review of other independent studies for first-cycle studies.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.