

KA104X Degree Project in Chemical Science and Engineering, First Cycle 15.0 credits

Examensarbete inom kemivetenskap, grundnivå

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

Establishment

Course syllabus for KA104X valid from Spring 2019

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

General entry requirements, plus Mathematics E, Physics B and Chemistry A, and 120 credits should be completed in courses for first-cycle studies in chemistry and chemical engineering.

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 exercise judgement considering relevant scientific, social and ethical aspects.
- 7. show a level of proficiency that is required to independently work within some part of the main technical field.

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 involving lectures and reflections concerning prerequisites 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.

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.