

KE2920 Project in Chemical Engineering 30.0 credits

Projekt i kemiteknik

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

Establishment

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Chemical Science and Engineering, Chemistry and Chemical Engineering

Specific prerequisites

Appropriate courses for the chosen problem, at least 150 credits in chemistry and chemical engineering, 20 university credits (hp) in mathematics and 6 university credits (hp) in computer science or corresponding.

The examiner will determine if prerequisites are sufficient and that the student has sufficient depth studies for the selected task and also make likely that the proposed project work is expected to lead to that the student can develop the skills specified in the learning outcomes.

Director of undergraduate and master's studies, GA will assess and approve the proposed project by the examiner. Examiner presents a brief description of the project on the application form.

Language of instruction

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

Intended learning outcomes

After completing the course, students should be able to:

- apply knowledge and skills in chemistry and chemical engineering obtained in earlier studies
- analyze a specific research task or a qualified problem
- obtain the necessary information for the formulation of the problem and plan how the task can be solved within a given framework with adequate methods.
- perform experimental and theoretical treatment of the task
- look for information in scientific literature
- · correctly use and reference source material
- able to document and present their work, for a given target, with the highest standards of structure, formality and language processing
- able to identify their need for further knowledge and continuously develop their skills

Course contents

Course is designed as an individual project work equivalent 20 weeks of full-time job. A current problem or research project in chemistry and chemical engineering are formulated and analyzed in conjunction with interested teachers. The task can be theoretical and / or experimental nature.

In general, the project begins with studies of its background and with a literature review. Then the task is planned and, where appropriate a project plan for the experimental work is formulated. The work ends with a written report of good quality where the background and the objectives of the project and the used method are described and where the results are fully documented, analyzed and discussed.

Course literature

Väljs i anslutning till projektuppgiften

Relevant scientific articles and textbooks in the field

Examination

• PRO1 - Project, 30.0 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.

The written report should preferably be written in English.

Other requirements for final grade

Relevant literature study, approved planning / project plan and approved final written report (PRO1; 30 hp).

The student should first write a planning report for description of the problem/project assignment and it should also include a plan for the project. The planning report is submitted to the examiner for approval.

The final written report should be checked with tools for plagiarism by the examiner before it can be approved.

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.