



KH1150 Engineering Skills 9.0 credits

Informationsteknik och ingenjörsmetodik

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

Establishment

Course syllabus for KH1150 valid from Autumn 2017

Grading scale

P, F

Education cycle

First cycle

Main field of study

Chemistry and Chemical Engineering, Technology

Specific prerequisites

The upper-secondary school from 1 July 2011 and adult education at upper-secondary level from 1 July 2012 (Gy2011):

Specific requirements; Physics 2, Chemistry 1 and Mathematics 3c, with at least the grade Pass.

The upper-secondary school before 1 July 2011 and adult education at upper-secondary level before 1 July 2012

Specific requirements of mathematics, physics and chemistry corresponding to Mathematics D, Physics B and Chemistry A, with at least the grade Pass or 3.

Language of instruction

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

Intended learning outcomes

The main goal of the course is to give the student an insight into the role as chemical engineer and knowledge of engineering methodology

When you have passed the course you will be able to:

- describe the role of an chemical engineer and the working field
- use the computer as a working tool
- seek for information in printed and electronic resources
- work in a project-oriented manner in a prescribed project
- be a part of a project group and actively contribute to the project result
- present her/his work in a technical report
- plan and carry out an oral presentation

Course contents

The programme and the role of the engineer: Programme information, study technique, chemistry in the society, ethics. A project on a subject typical to the field of the programme.

Computer systems and the computer as a working tool:

Design and function, graphic interfaces, word processing and calculation,

computer networks, computer communication, structure and possibilities of Internet, computer safety.

Project work: Planning, structure and distribution of work. Specification of requirements, project plan and time schedule. Use of documented work methods. Project meetings, minutes, follow up and project report.

Presentation and information technology: Search for information. Human as an information receiver. To present ideas and suggestions. To document work, methods and results. Report writing. Oral presentation. Computer based aids for oral presentations

Course literature

Andersen E. S., Schwencke E. "Projektarbete – en vägledning för studenter" Studentlitteratur, 2013

Andersson, Sonesson, Vannerberg "Kemin i samhället", Liber, 2001

Examination

- SEM1 - Seminars, 1.5 credits, grading scale: P, F
- ÖVN1 - Exercises, 3.0 credits, grading scale: P, F
- PRO1 - Project, 4.5 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

Passed exercises, and attendance at mandatory exercises (ÖVN1; 3 credits)

Passed projectwork (PRO1; 4,5 credits)

Passed seminars (SEM1; 1,5 credits)

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.