



LTH

FACULTY OF
ENGINEERING

Course syllabus

Chemical Engineering, Project Laboratory Projektlaboration i kemiteknik

KETF05, 7.5 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering LTH

Decided by: PLED B/K

Date of Decision: 2023-04-18

General Information

Main field: Technology **Depth of study relative to the degree**

requirements: First cycle, in-depth level of the course cannot be classified

Mandatory for: K3

Language of instruction: The course will be given in English on demand

Aim

An important work task for chemical engineers is to participate in the implementation of chemical reactions in both large and small scale. The work requires skills in

- retrieving information in the fields of chemistry and engineering
- performing applied studies in chemical engineering and evaluating experimental results
- compiling and communicating obtained results from ongoing projects as well as in final documents.
- group collaboration in the different stages of a chemical engineering project including preparation, planning, experimental work and reporting

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- be able to evaluate, present and draw conclusions from the achieved results of the experiments
- be able to critically judge the reliability of the results based on obtained data

Competences and skills

For a passing grade the student must

- perform a study in chemical engineering including information retrieval, experimental planning, data collection, evaluation of the experimental results, which have to be reported in the form of technical reports and presented orally

Judgement and approach

For a passing grade the student must

- be able to design and perform experiments with consideration of safety and disposal rules

Contents

The project comprises a mandatory assignment in chemical engineering. The work, which is performed as a group assignment, should give the students training in solving a given task in groups, including the study of relevant literature, planning of experiments, experimental work and evaluation of the results. Reporting is made in the form of written and oral reports.

Examination details

Grading scale: UG - (U, G) - (Fail, Pass)

Assessment: Literature study, planning of experiments and experimental work, reported in both oral and written form.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Modules

Code: 0112. **Name:** Chemical Engineering, Project Laboratory.

Credits: 7.5. **Grading scale:** UG - (U, G). **Assessment:** Active participation in experimental work. Oral presentation and written reports.

Admission

Admission requirements:

- KAKF05 Analytical Chemistry **or** KETF01 Transport Phenomena, Basic Course

Assumed prior knowledge: KETF25 Reaction engineering and FMSF70/FMS086 Mathematical statistics.

The number of participants is limited to: No

Kursen överlappar följande kurser: KTE022 KTE023

Reading list

- Books, papers and other related chemical engineering literature.

Contact and other information

Course coordinator: Universitetslektor Mats Galbe,
Mats.Galbe@chemeng.lth.se

Teacher: Borbala Erdei, borbala.erdei@chemeng.lth.se

Course homepage: <https://www.ple.lth.se/en/>

Further information: When the course registration period has finished, the student must choose the desired project work.