



## Course syllabus

Faculty of Technology

Department of Built Environment and Energy Technology

4BT309 Projekteringsmetodik, 15 högskolepoäng

Project Work and Methodology, 15 credits

**Main field of study**

Bioenergy Technology

**Subject Group**

Energy Technology

**Level of classification**

Second Level

**Progression**

A1N

**Date of Ratification**

Approved by Faculty of Technology 2017-04-03

The course syllabus is valid from spring semester 2018

**Prerequisites**

English B. Basic eligibility for advanced level studies.

90 credits in some of the subject Energy Technology, Chemical Engineering, Mechanical Engineering, including Environmental Technology / Environmental Chemistry at least 7.5 credits, 7.5 credits Physics, Thermodynamics 7.5 credits, Energy 15 credits, Mathematics 22.5 credits or equivalent

## Objectives

After the course the student is expected to:

- Be able to plan and carry out a major investment
- Be able to time plan a project and deliver according to plan
- Explain the development stages of planning
- Explain how technology, economics and marketing work together
- Be able to estimate the investment and operating costs and establish a sensitivity analysis
- Be able to write a technical report and present it orally
- Be able to justify conclusions and propose how the work can be used

## Content

The course covers the following topics:

- Problem of the feasibility study of the project or pre-project
- General overview of a project's development phases and project
- Technique design of process or product
- Economic estimation of operating and capital costs, production costs, sensitivity analysis and project evaluation
- Written and oral presentation of the project task

## Type of Instruction

Classroom instruction and literature studies, individual work in projects

## Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

The assessment of student performance based on the project, ie written and oral presentation.

## Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

## Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Some elements may entail costs defrayed by the course participant

## Required Reading and Additional Study Material

### **Required reading**

Literature is chosen in consultation with the supervisor