

# AF2025 Architectural Engineer-ing Project 7.5 credits

#### Projekt för huskonstruktörer

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

If the course is discontinued, students may request to be examined during the following two academic years

#### **Establishment**

Course syllabus for AF2025 valid from Autumn 2021

## **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

Second cycle

## Main field of study

**Built Environment** 

### Specific prerequisites

Documented knowledge in Building Technology, Structural Mechanics, Structural Engineering equivalent to at least 15 ECTS corresponding to the content in courses AF2401 and AF2003.

Eng B/6 according to the Swedish upper secondary school system.

### Language of instruction

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

#### Intended learning outcomes

After the course student should be able to:

- To make a project proposal, for a building, that takes into account the different aspects of sustainability
- Select technical solutions and illustrate those solutions with technical drawings
- Reflect on the choice of technical solutions in terms of the risk of moisture damages
- Describe some of the most relevant factors related to energy use of buildings
- Discuss the influence of different parameters on energy use
- Discuss the influence of different parameters on Global Warming potential and Embodied Energy
- Reflect on different aspects of sustainability related to a building project

#### Course contents

Functional requirements for buildings. Architectural design, Foundations and structure. Selection of materials: Technology, environment, durability, aesthetics, economy. Building components and detailing. Sustainability, environmental aspects and energy use. Building information models.

#### **Examination**

- PRO1 Project Assignment, 5.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 Exercises, 2.5 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.

Project and exercises

## Other requirements for final grade

Passed Project Assignment

# **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.