A21REA Representation 2: Fabrication and Descriptive Geometry 3.0 credits

Representation 2: Fabrikation och deskriptiv geometri

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

Establishment

The official course syllabus is valid from autumn semester 2026 as decided by the Director of First and Second Cycle Education. Decision date: 2026-04-14

Grading scale

P, F

Education cycle

First cycle

Main field of study

Architecture

Specific prerequisites

You should have passed the course A11REA Representation 1: Drawing Technique and Descriptive Geometry 3.0 credits

Intended learning outcomes

Upon successful completion of the course, the student should be able to:

- critically apply descriptive geometry to design complex forms and their fabrication
- master various representation techniques to create well-formed and complex representations for presentation and fabrication
- develop an in-depth understanding of the relationship between analogue and computer-based processes in order to articulate, analyse, design and produce form, image and model
- engage in critical discussions about their learning in relation to the subject of architecture and the architectural profession

Course contents

This course deepens students' knowledge of geometry, drafting, and descriptive geometry for digital spatial visualization in architecture. Students study digital techniques for design and fabrication in relation to contemporary developments in architecture. In addition to lectures, the course is divided into two exercises: Exercise 1—Articulation and Exercise 2—Fabrication.

(Tools: AutoCAD, Rhino, parametric tools, 3D printing, CNC routing. Can vary from year to year.)

Examination

- MOM1 - Moment1, 3.0 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.

Other requirements for final grade

Learning outcomes are assessed through presentations of the process and results in assignments specified at the start of the course. To receive a grade, students must submit all required assignments and maintain 80% attendance at lectures, seminars, tutorials, and review sessions. Students must also submit a reflection on their own learning.

Course module supplementation means that a student who has received a grade of F and is deemed to be close to meeting the requirements for a passing grade of P may be given the opportunity to complete supplementary work to achieve a passing grade. The course examiner decides whether supplementation is possible. The supplementary assignment is designed based on the learning objectives the student has not achieved. The student shall be given 15 working days to complete the supplementary work. After that, supplementary work

may not be done, in accordance with KTH’s guidelines on course syllabi, grading systems, and examination.

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.