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.

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

Establishment

Course syllabus for A21REA valid from Autumn 2011

Grading scale

P, F

Education cycle

First cycle

Main field of study

Architecture

Specific prerequisites

The student must fulfill the curricular requirements for the second year.

Language of instruction

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

Intended learning outcomes

After completing this course, students should be able to:

· move among digital techniques for drafting, modeling, and fabrication;

· communicate using two- and three-dimensional drawings and models;

· use perspectival sections to describe structural, building technology, and spatial relations;

· use graphic notations in combination with drawings to express sensory qualities and atmospheres (e.g. light, pattern, texture, rhythm);

· apply drafting and geometric modeling techniques for analysis (analytical drawings), design, and manufacturing processes.

· reflect on the role of drafting techniques for design and digital techniques for fabrication in the architectural discipline and professional practice.

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.)

Course literature

Information will be given at the start of the course.

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.

Other requirements for final grade

The learning outcomes are examined through the records of the design process, and through the outcomes of the course specified assignments. To achieve the approved level (pass) students must have approved tasks, including 80% attendance at lectures, seminars, tutorials and reviews.

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.