# AD1PR1 3D-Printing 1 2.0 credits

## 3D-Printing 1

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

## Establishment

Course syllabus for AD1PR1 valid from Spring 2009

## Grading scale

P, F

## Education cycle

First cycle

## Main field of study

Architecture

## Specific prerequisites

Students at the architecture program, KTH.

## Language of instruction

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

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# Intended learning outcomes

The objective of this course is to teach the students how a digital 3D-model can be output as a physical model or prototype through 3D-printing. Upon completing the course, students should be able to independently operate the 3D-printer located in the Digital Fabrication Lab of the KTH School of Architecture.

# Course contents

The following course elements are considered and implemented; short general introduction to rapid prototyping techniques, introduction to the principles of 3D-printing, various methods for converting a surface based model to a solid based model, conversion of NURBS or SubD models to mesh models, orientation in different file formats, managing the 3D-printer in the Digital Fabrication Lab of the KTH School of Architecture, rules and policies.

# Disposition

3D-modelling techniques are introduced in lectures. Practical training sessions lead by a teacher takes place in the Digital Fabrication Lab of the KTH School of Architecture.

# Examination

 • MOM1 - Active Participation in all Lectures and Training, 2.0 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

Active participation in all lectures and practical training sessions.

# 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.