



AF2720 BIM2, Design, Installation and Integrated Planning

7.5 credits

BIM2, projektering, installation och samordning

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

Establishment

Course syllabus for AF2720 valid from Spring 2013

Grading scale

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

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

120 credits within the study fields of structural engineering/building services engineering/architecture /CAD, course AF1730 Building Information Modeling 7.5 credits or equivalent knowledge and Swedish B and English A. Alternatively, a Bachelor of Science in Engineering in Constructional Engineering and Design or a Master of Science in Engineering in Built Environment from KTH or an equivalent degree.

Language of instruction

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

Intended learning outcomes

This course aims to provide a general introduction to 3D design, installation and coordination.

Upon completion of this course, the student shall:

- Understand the theory behind Building Information Modeling (BIM)
- Be able to manage model data and use databases in BIM design
- Be able to coordinate installation with MagiCad
- Be familiar with the collision detection capabilities in Navisworks
- Be able to apply this knowledge to a project

Course contents

Problem-based learning: the course revolves around a project based on a given architectural model. During the course, students will perform simplified installation planning and planning coordination. The elements below are the needed basis.

The following topics will be covered in this course:

- General definition of BIM
- MagiCAD and BIM
- MagiCAD and IFC - IFC Viewers
- IFC Import using AutoCAD MEP
- Coordination between planners
- Introduction to MagiCAD in Revit MagiCAD and Revit MEP
- Installation coordination using Navisworks

Disposition

The course elements include a theory section, a briefing and demonstration section, and a project section in which knowledge is practised and integrated in a project.

Course literature

Reading materials will be announced at the start of the course.

Examination

- PRO2 - Project Work, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project, 2.0 credits, grading scale: P, F
- TEN1 - Examination, 1.5 credits, grading scale: A, B, C, D, E, FX, 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.

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.