AF1748 Building Information Modeling 5.0 credits

Building Information Modeling

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

Establishment

The official course syllabus is valid from spring semester 2027 as decided by the Director of First and Second Cycle Education. Decision date: 2026-10-15

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Completed ÖVN1 - Exercises, 2.5 credits in AF1737.

Intended learning outcomes

Upon completion of the course, the student shall be able to:

- Draw, edit, and dimension parametric objects

- Create a building model based on given input data
- Generate schedules and listings based on the model
- Manage views and documentation presentations
- Export to and import from other file formats
- Collaborate on projects through shared project work (worksharing) with different disciplines.

Course contents

- The theory behind Building Information Modeling (BIM) and its differences compared to traditional design and planning methods
- BIM as a design and planning methodology for economically and environmentally sustainable construction
- Parametric building modeling
- Integration with other CAD software and data file formats
- Creating documentation and presentation layouts for the display and presentation of building models in accordance with Swedish building regulations and standards
- Practical exercises in collaborative design and planning through so-called worksharing techniques.

Examination

- TEN1 - Written exam, 5.0 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.

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.