



## KURSPLAN

# Advanced Building Information Modeling, 6 högskolepoäng

*Advanced Building Information Modeling, 6 credits*

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<b>Kurskod:</b>	TABS29	<b>Utbildningsnivå:</b>	Avancerad nivå
<b>Fastställd av:</b>	VD 2018-12-04	<b>Utbildningsområde:</b>	Tekniska området
<b>Reviderad av:</b>	Utbildningschef 2021-10-27	<b>Ämnesgrupp:</b>	BY1
<b>Gäller fr.o.m.:</b>	2022-01-01	<b>Fördjupning:</b>	A1F
<b>Version:</b>	2	<b>Huvudområde:</b>	Produktutveckling

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### Lärandemål

After a successful course, the student shall

Kunskap och förståelse

- show familiarity with the product development process using advanced BIM-models.

Färdighet och förmåga

- demonstrate skills in using BIM-based Design Authoring tools for a technical subsystem.
- demonstrate skills in using BIM-based Analysis tools using a BIM-model containing technical subsystem.
- demonstrate the ability to produce information delivery for construction and digital fabrication.

Värderingsförmåga och förhållningssätt

- demonstrate an understanding of the use of BIM-strategies and advanced BIM-models in the product development.

### Innehåll

The course teaches elaborate handling of advanced BIM-models at different stages of the product development process. It also includes the creation of advanced production specifications for fabrications, e.g. specified in engineering drawings and files for numerical controlled production equipment.

The course includes the following elements:

- Design Authoring of advanced BIM-models containing technical subsystems
- BIM-based analysis using advanced BIM-models
- Information delivery for construction and digital fabrication

### Undervisningsformer

The course consists of lectures, exercises and seminars.

Undervisningen bedrivs på engelska.

### Förkunskapskrav

The applicant must hold the minimum of a bachelor's degree (i.e the equivalent of 180 ECTS credits at an accredited university) with at least 90 credits in construction engineering or civil engineering, or equivalent. The bachelor's degree should comprise a minimum of 15 credits in mathematics. The applicant must also have completed the course BIM - Requirements and Specifications, 7,5 credits or equivalent. Proof of English proficiency is required.

### Examination och betyg

Kursen bedöms med betygen 5, 4, 3 eller Underkänd.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Project	6 hp	5/4/3/U

### Kurslitteratur

The literature list for the course will be provided 8 weeks before the course starts. Articles and course compendium are free of charge.