



COURSE SYLLABUS

Advanced Building Information Delivery, 7.5 credits

Advanced Building Information Delivery, 7,5 högskolepoäng

Course Code: TADS23	Education Cycle: Second-cycle level
Confirmed by: Dean Mar 1, 2023	Disciplinary domain: Technology
Revised by: Director of Education Nov 28, 2024	Subject group: BY1
Valid From: Aug 1, 2025	Specialised in: A1F
Version: 4	Main field of study: Built Environment

Intended Learning Outcomes (ILO)

After a successful course, the student shall:

Knowledge and understanding

- display knowledge of the basics of Process Modeling
- display knowledge of the basics of Information Modeling
- show familiarity with different formats used for Information Exchanges.

Skills and abilities

- demonstrate the ability to create a BIM Project Execution Process
- demonstrate the ability to use the Information Models utilized today
- demonstrate the ability to develop advanced Information Exchanges.

Judgement and approach

- demonstrate an understanding of the roles of Process Modeling and Information Modeling in the Building Process
- demonstrate an understanding of the different roles of Asset models and Project models and the information exchanges needed to fulfill these roles.

Contents

The course Advanced Building Information Delivery covers the technological basics of BIM and addresses computational methods for information modeling (semantic modeling) of buildings as well as methods for process modeling. It also covers the important aspect of the interoperability of BIM software products and describes some of the standardized data formats and classification systems used for information exchange in the building industry.

The course includes the following elements:

- Process modeling
- Information modeling
- Information Delivery Specifications and and Product Data Templates.

Type of instruction

The course consists of lectures, exercises, and seminars.

The teaching is conducted in English.

Prerequisites

Passed courses at least 90 credits within the major subject in Construction Engineering, Civil Engineering, Built Environment, Architecture Engineering, Product Development (with relevant courses in Lighting Design) or equivalent and 15 credits in mathematics, and taken course BIM - Management, Control and Evaluation, 7,5 credits, or equivalent. Proof of English proficiency is required.

Examination and grades

The course is graded 5,4,3 or Fail.

Some course components, such as lectures, labs, or seminars, may be mandatory due to their unique and non-repeatable nature.

The final grade for the course is based on a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Examination	2.5 credits	5/4/3/U
Exercises and seminars	5 credits	5/4/3/U

Course literature

The literature list for the course will be provided 8 weeks before the course starts.

CIC, C. I. C. R. P. (2011). BIM Project Execution Planning Guide – Version 3. Retrieved from University Park, PA, USA

Borrmann, A., et al. (2018). Building Information Modeling: Why? What? How? Cham, Springer International Publishing