

COURSE SYLLABUS

BIM - Requirements and Specifications, 7.5 credits

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Course Code: TBRR22 Education Cycle: Second-cycle level

Confirmed by: Dean Mar 1, 2022 Disciplinary Technology

Revised by: Director of Education Oct 25, 2023 domain:

Valid From: Aug 1, 2024

Specialised in: A1N

Version: 2

Main field of study: Built Environment

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- display knowledge of the most common BIM uses in building projects
- display knowledge of the business value of BIM uses in building projects
- show familiarity with information and process requirements in BIM based projects
- demonstrate comprehension of data driven evaluation methods for BIM use

Skills and abilities

- demonstrate the ability to author a BIM execution plan
- demonstrate the ability to author information requirements in a building project
- demonstrate the ability to author evaluation criteria for BIM use

Judgement and approach

- demonstrate an understanding of how different BIM-uses contribute to fulfilling project goals in a building project

Contents

The course focuses on how to specify BIM uses to achieve goals and values in building projects. Students attain knowledge and understanding of how different BIM uses can be identified and expressed in a BIM strategy. In addition, students learn how information needs and processes can be specified in BIM Execution Plans and Information Requirements to ensure their practical implementation in projects and how to define criteria useful for evaluating the BIM based work in building projects.

The course includes the following elements:

- BIM uses in Planning, Design, Construction and Operation of a building
- BIM strategies
- BIM manual
- Information Requirement / Information Delivery

Type of instruction

The course consists of lectures, exercises, and seminars.

The teaching is conducted in English.

Prerequisites

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, Civil Engineering, Built Environment, Architecture Engineering, Product Development (with relevant courses in lighting design) or equivalent. The bachelor's degree should comprise a minimum of 15 credits in mathematics and 7,5 credits in BIM or CAD 3D, or equivalent. Proof of English proficiency is required.

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination ¹	3 credits	5/4/3/U
Exercises and Seminars	4.5 credits	U/G

 $^{^{\}rm I}\,$ Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

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

Articles and course compendium free of charge.