COURSE SYLLABUS
Knowledge Intensive BIM, 6 credits

Knowledge Intensive BIM, 6 högskolepoäng

Course Code:	TKBS28	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Apr 6, 2018	**Disciplinary domain:**	Technology
Valid From:	Aug 1, 2018	**Subject group:**	BY1
Version:	1	**Specialised in:**	A1F
		Main field of study:	Product Development

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
- demonstrate comprehension of how research methods can be used to create knowledge about the development and application of digital technologies in the built environment sector

Skills and abilities
- demonstrate the ability to analyze and explain the knowledge domains needed to explore and exploite new, or potentially new digital applications aimed for use in the built environment sector
- demonstrate the ability to analyze and explain how knowledge gained from used research methods can be exploited in the built environment sector
- demonstrate the ability to analyze and explain advantages and disadvantages with different research methods for developing knowledge

Judgement and approach
- demonstrate the ability to analyze and explain pros and cons of various research methods when creating knowledge about the development and application of digital technologies in the built environment.

Contents

The course takes its point of departure in the need for knowledge creation in order to meet emergent digital applications aimed for use in the built environment sector. Knowledge intensive BIM is a continuation of the course Research Method, where the student gains basic knowledge concerning research methods. In this course the focus will be on how research methods can be used to create knowledge about the development and application of digital technologies in the built environment sector.

Thus, in order to gain an enhanced understanding of implementation of digital technologies and the Construction Industry the course includes the following topics:

- Knowledge domains and their taken for granted assumptions
- How to approach and explore knowledge domains
- How to exloit knowledge explored by various research methods

Type of instruction

Lectures, exercises and assignments/project work.

The teaching is conducted in English.

Prerequisites

Passed courses 180 credits in first cycle, at least 90 credits within construction engineering or civil engineering and 15 credits Mathematics, and completed the course BIM - Management and Control, 4,5 credits and the course Research Methods, 6 credits

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination[I]	3 credits	5/4/3/U
Assignments/Project work	3 credits	U/G

[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 one month before the course starts.