

# COURSE SYLLABUS **Research Methods for the Built Environment**, 7.5 credits

Research Methods for the Built Environment, 7,5 högskolepoäng

Course Code: Confirmed by: Revised by:	TRBS23 Dean Mar 1, 2023 Director of Education Nov 28, 2024	Education Cycle: Disciplinary domain:	Second-cycle level Technology
Valid From: Version:	Aug 1, 2025 4	Subject group: Specialised in: Main field of study:	BY1 A1F Built Environment

# Intended Learning Outcomes (ILO)

After a successful course, the student shall:

Knowledge and understanding

- display knowledge in identifying research problems, its theoretical framing, and the consequences for research design

- display knowledge in selecting appropriate research methods.

Skills and abilities

- demonstrate the ability to prepare a research plan

- demonstrate the ability to experiment with data collection and data treatment of a cohort

- demonstrate the ability to apply assessment methods for interaction between humans and the built environment (products and/or services).

Judgement and approach

- demonstrate the ability to critically review evidence levels for research papers
- demonstrate the ability to compose a research plan

- demonstrate the ability to argue for research design and its consequences.

#### Contents

The course will provide students with knowledge about the research process within the built environment subject, from formulations research problems to the written production of scientific essays.

The course includes the following elements:

- Introduction to research for the built environment and the research process
- Introduction to human factors in the built environment

- Methodology for investigation of the built environment including quantitative and qualitative assessment methods

- Specific research approaches for the Built Environment including for example Human factors, Evidence Based-Design, Post Occupancy Evaluation, etc.

# 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 Scientific Introduction to BIM and Sustainability 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 upon 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
Assignment	5 credits	5/4/3/U
Examination	2.5 credits	5/4/3/U

# **Course literature**

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