

SYLLABUS

Development Project - Construction 7.5 credits W7009B

Utvecklingsprojekt - bygg

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2021-02-17**

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Utvecklingsprojekt - bygg

Second cycle, W7009B

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Väg- och vattenbyggnad	Civil Engineering

Entry requirements

Knowledge corresponding to or equal to a bachelor's degree in Civil, Building or Architectural Engineering.
At least 30 credits (ECTS) of courses on the advanced level

Selection

The selection is based on 30-285 credits

Course Aim

After completing this course students will:

- have insight into current research and development work within the specific niche for their project
- be able to plan a development project with time and resource planning
- have carried out a qualified development project within given resource frameworks that corresponds to the level of requirements set when the student later acts in professional life
- be able to reflect on the own method for carrying out the project reflected in theories for project management
- be able to reflect on the results of their own development project, considering society's demands for social, economic and ecological sustainability
- be able to assess the technology's possibilities and limitations in their own solution to the problem and reflect on the limitation in the reporting
- be able to independently determine the need to simulate, model or evaluate what is being studied
- independently (with the support of an expert) be able to choose a method for carrying out the development project
- be able to present their results to target groups outside the university in writing in English
- be able to present their results to target groups outside the university orally
- have an overview of what a degree project is, how it can be planned, implemented and shaped

Contents

The course is based on the student being able to complete all or parts of the CDIO cycle; conceive, develop, implement and operate. The course does not contain any new theoretical substantiation of the subject area of the projects. However, the project work is supported by: 1. Method lectures 2. Review of degree project; frameworks and intentions and 3. Ethics discussion.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course is conducted as an application of the knowledge the student has acquired in previous studies. The application takes place through participation in the planning and implementation of an advanced assignment that may include development of new products, methods, processes, etc. The student participates in the course with his / her professional basis as a starting point and will have to work on a similar project the student encounters in his or her future professional life. The work is carried out in groups that are divided based on competence. Each group will have a supervisor from the university. The project is also often supported by external supervisors with professional experience. The reporting must be of a high standard, supported by references and carried out so clearly that a person who is not familiar with the project before will be able to take part in and continue working on the information produced. The solution that is developed must be presented in the reporting and the student must also reflect on the solution and the alternatives that were available during the work.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The part Method includes planning of the development project and knowledge of degree project and associated methods. The part Essay includes writing an individual conference article in English on a topic that relevant for the development project. The Presentation part includes planning and implementing a filmed presentation of the development project.

For a passed final grade on the course, it is required that all compulsory parts and partial assignments are completed with a passed result. Mandatory attendance applies to the practical exercise on article writing. Grading scale for the elements Method and Presentation is G U. The final grade in the course is governed by the individual examination element Essay where the grade is given according to scale U, 3, 4, 5.

The system is described in detail in the study guide that is distributed at the beginning of the course.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course W7009B is equal to W7011B, K7006B

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Method	U G#	1.5	Mandatory	A17	
0002	Essay	G U 3 4 5	5	Mandatory	A17	
0003	Presentation	U G#	1	Mandatory	A17	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2021-02-17

Syllabus established

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2017-02-08