

Multidisciplinair Project Building Technology (E715026)

Course size (nominal values; actual values may depend on programme)

Credits 12.0 Study time 350 h Contact hrs 48.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 2) Dutch project 48.0 h

Lecturers in academic year 2018-2019

Steeman, Marijke	TW01	staff member
Vandedrinck, Frank	TW14	staff member
Vandenbruwane, Ignaas	TW14	staff member
Vinckier, Dirk	TW15	staff member
Wylaers, Marc	TW14	lecturer-in-charge

Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Civil Engineering Technology	12	A

Teaching languages

Dutch

Keywords

final project

Position of the course

Is developed in a group with 3, exceptionally 2 students.

Integrating solution techniques and methods from different disciplines, including road construction, sanitation, CAD, CAE, materials leather, building structures, building physics, metal construction, concrete, strength of materials and stability, design, soil mechanics and foundations in the context of a particular problem.

Contents

Part 1: Civil Engineering;

Design and study of the implementation plan of parcels and sewerage design. Details of the sewerage.

Part 2: Architecture:

The general plans shall be made available. The materials for the skeleton, the basement, the non-bearing walls, the supporting floor and the outer shell can be specified. The study may include: apartments, industrial buildings, schools, cultural center, gymnasium, stadium, parking garage, hotel, etc. ..

1. Architecture of structural work and finishing:

Study from general plans and the details.

2. Stability and foundation:

Drafting of stability and foundation file (calculation notes, construction plans, surveys).

3. Techniques and installations, Building Physical examination:

Preparation of the dossier of the techniques and technical installations (calculation notes, implementation plans, test stands, cutlery and cost). The study may include: ventilation, heating, fully air and warmth and moisture.

The project can be adapted and / or expanded depending on the demand from the business world.

Initial competences

The student must have a:

- General scientific training.
- General technical training.
- The academic bachelor engineering or a linking engineering have followed.

Final competences

- 1 Create a parcels development and sewerage disgn on.
- 2 To draw the general plans and the details of a complex engineering structure
- 3 The stability and the foundation of a complex building structure calculate and draw.
- 4 The techniques in a complex building structure calculate and draw.
- 5 The ability to apply building physics aspects in a complex building structure.
- 6 Develop the assignment in a team

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Project

Extra information on the teaching methods

Project.

There may be lectures, demonstrations, corporate and site visits become organized.

Learning materials and price

All courses in the bachelor and master's architecture.

Cost: 205 euro

150 euro: Expenses charged to the student organization:

- Communication costs.
- Travel expenses and accommodation.
- Consultation of data and documentation
- Editing and printing the file.
- Presentation.

Factory and building-site visits: 55 euro. Safety shoes S3, helmet and yellow fluorescent jacket.

References

Course content-related study coaching

There is guidance provided by the promoters of the UGent.

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Assignment, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Extra information on the examination methods

All projects are to be completed in teamwork. Each member is expected to contribute equally to the final result. All team members are responsible for the final result. Each team member should have an equal contribution in all parts of the project.

The final mark is identical for all team members, unless the commitment of one or several team members is poor, which will lead to a different individual mark.

The assignments are handed in on a beforehand communicated date and time. All projects not handed in in time will be considered absent.

Frequency of permanent evaluation: five times per semester. Oral presentation and explanation of the prepared dossier by the group. A jury of lecturers and potential external members evaluates the quality of the content.

Unjustified absence will be graded zero

Evaluation in the second examination period: completion and/or improvement of the dossier. Evaluation of the final result by the coaches, this accounts for 100% of the total score.

There is an individual report for the lectures, demonstrations, factory and buiding-site visits.

Evaluation in the second examination period is not possible for the lectures, demonstrations, buildingsite- and company visits. The score of the first examination period is retained.

Calculation of the examination mark

Part 1 civil engineering: 25%

Part 2 architecture: 75%

1. Architecture of structural and finishing work: 1/3

2. Stability and foundation: 1/3

3. techniques, technical equipment and building physics research: 1/3

The course consists of four parts ie designs civil engineering, architecture masonry and finish, stabilitet and foundations, techniques + technical installations and building physics.

When the student does not participate in the evaluation of one or more components or the student scores less than 10/20 for one of the components, he/she can no longer pass the entire course unit. If the total score is a mark of ten or more out of twenty, then this is reduced to the highest failing mark.

Unjustified absence in the project work gives rise to a total maximum score of 9/20.

The individual points of the lectures, demonstrations, factory and building-site visits count in the component to which they relate.

Facilities for Working Students

No facilities for working students.