Course Specifications

Valid as from the academic year 2016-2017

Design of Civil Structures (E050100)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course offerings and teaching methods in academic year 2020-2021

<table>
<thead>
<tr>
<th>Offered in the following programmes in 2020-2021</th>
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<tr>
<td>crdts</td>
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<tr>
<td>Bridging Programme Master of Science in Civil Engineering</td>
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Course size

<table>
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<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
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<tr>
<td>3.0</td>
<td>90 h</td>
<td>25.0 h</td>
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Lecturers in academic year 2020-2021

- De Pauw, Bart (TW15 lecturer-in-charge)

Teaching languages

- Dutch, English

Keywords

- civil design, structure

Position of the course

Familiarizing the students, at the end of their studies, with the actual construction activities, by perusal and in depth study of an actual building project, including the detailing of a part of the structure.

Contents

- Analysis of an actual construction: Report with special attention to functionality, necessary design work and repetition, analysis of strengths and weaknesses
- Detailing and report on analysis of a structure part: principles; schemes for numerical models, use of software packages

Initial competences

- All knowledge and information from structural engineering education.

Final competences

1. Design constructions autonomously; analyse and calculate independently components of a structure.
2. Detect the function and use of construction parts and place them in the whole structure
3. Apply independently the knowledge acquired from other courses to real structures

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
Learning materials and price
   Project bundles with all necessary data is supplied. Furtheron, the student relies on his syllabi of other courses and possibly on literature research.

References

Course content-related study coaching
   The teacher is available on request and before and after courses.

Evaluation methods
   end-of-term evaluation and continuous assessment

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

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

Examination methods in case of permanent evaluation
   Oral examination, 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
   During semester: graded report (oral presentation and defense) of the assessment of a given structure (in group), introduction of the project reports (individual)
   During examination period: graded project reports and oral defense of the project report (individual)

Calculation of the examination mark
   Special conditions: 20% for assessment of a given structure and 80% for design and calculation of a building part and oral defense of the project report. If one of these subscores results in a score lower than 7/20, the student cannot pass for this course. The final score in this case will be the minimum of 9/20 and the calculated value as described above.