

## Mechanical and Civil Engineering (F000213)

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

Credits 4.0      Study time 120 h      Contact hrs 60.0 h

Course offerings and teaching methods in academic year 2018-2019

|                |       |            |        |
|----------------|-------|------------|--------|
| A (semester 1) | Dutch | group work | 15.0 h |
|                |       | lecture    | 45.0 h |

Lecturers in academic year 2018-2019

|                   |      |                    |
|-------------------|------|--------------------|
| De Baets, Patrick | TW08 | lecturer-in-charge |
| Craeye, Bart      | TW14 | co-lecturer        |

Offered in the following programmes in 2018-2019

|  | crdts | offering |
|--|-------|----------|
| <a href="#">Bachelor of Science in Economics</a>                             | 4     | A        |
| <a href="#">Bachelor of Science in Business Engineering</a>                  | 4     | A        |
| <a href="#">Master of Science in Economics</a>                               | 4     | A        |
| <a href="#">Preparatory Course Master of Science in Business Engineering</a> | 4     | A        |
| <a href="#">Preparatory Course Master of Science in Business Engineering</a> | 4     | A        |

Teaching languages

Dutch

Keywords

Mechanical Engineering, Machine Construction, Production Technology, Energy Conversion, Civil Engineering, Structural Analysis, Construction Materials

Position of the course

The course teaches the main principles of mechanical and civil engineering. The 'language of civil engineers' is explained, without going into details.

Contents

### MECHANICAL ENGINEERING

- 1 Basic principles: mechanical drawing, codes
- 2 Machine construction: joining technology, bearing technology
- 3 Production technology: casting, forming, cutting
- 4 Energy conversion: piston machines, turbomachinery

### CIVIL ENGINEERING

- 1 Definitions and principles
- 2 Washington monument
- 3 Construction materials
- 4 Structures
- 5 The construction world: technical aspects
- 6 The construction world: economical aspects

Initial competences

No specific knowledge is required.

Final competences

Understand the basic principles of mechanical and civil engineering.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Group work, lecture

#### Extra information on the teaching methods

Lectures, video's, case studies.

#### Learning materials and price

Syllabus in Dutch

Mechanical Engineering, cost 45 EUR

Civil Engineering, cost 15 EUR

#### References

#### Course content-related study coaching

Through Minerva (electronic learning environment)

Personal coaching, after appointment

#### Evaluation methods

end-of-term evaluation and continuous assessment

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

Written examination

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

Written examination

#### Examination methods in case of permanent evaluation

Assignment

#### 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

Written examination.

#### Calculation of the examination mark

- End-of-Term evaluation: theory and exercises (Mechanical Engineering 50%, Civil Engineering 30%) written
- Permanent evaluation: case study Civil Engineering (report) (20%)
- In total thus 50% for Civil Engineering and 50% for Mechanical Engineering. However, if for one of both parts a score of 9/20 or less is obtained, this score will be maintained as score for the entire course