

Software Project (E761037)

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

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2023-2024

| | | | | |
|----------------|-------|------|------------|------|
| A (semester 2) | Dutch | Gent | group work | 0.0h |
|----------------|-------|------|------------|------|

Lecturers in academic year 2023-2024

| | | |
|-----------------|------|--------------------|
| Brouns, Leen | TW05 | staff member |
| Ongenaë, Veerle | TW05 | lecturer-in-charge |

Offered in the following programmes in 2023-2024

| | crdts | offering |
|--|--------------|-----------------|
| Bachelor of Science in Engineering Technology(main subject Information Engineering Technology) | 3 | A |

Teaching languages

Dutch

Keywords

Project, written and oral presentations, Computer Sciences (p170), Information Sciences (P175), Computer Technology (T120)

Position of the course

Design, implementation and presentation of a full-blown application, implementing the design and programming techniques acquired in various other courses.

Contents

In this course groups of students realise a software project using techniques acquired in other courses, complemented with techniques students mastered independently. Following topics will emerge during this project:

- Softwaredesign
- Team-distributed software implementation
- Team interaction
- Independent acquisition of new skills
- Version management
- Software documentation
- Presentation of results
- Construction of a working demo
- Software installation
- Guest lecture(s) on ethical behaviour, e.g. on open source and licences.

The Sustainable Development Goals are taken into account when choosing the subject.

Initial competences

- Being able to program in an object oriented way on an advanced level in Java
- Design programs in UML (following Software Design)
- Develop web and mobile clients (following Userinterfaces)

Final competences

- 1 Apply principles of software design for the purpose of production, maintenance and quality.
- 2 Acquire possible forms of modern programming techniques, languages and environments in theory, and apply these effortlessly in practice.
- 3 Search for, process and integrate information into a software application
- 4 Communicate correctly, in writing, orally and with the aid of multimedia, about one's own work and the sources consulted.
- 5 Work in groups, divide tasks, communicate and give feedback

6 Situate the delivered work in relation to the Sustainable Development Goals.

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

Group work

Extra information on the teaching methods

- project (30 hrs): group task, presence required

Learning materials and price

Project work:

- All relevant information will be made available using the electronic learning platform.
- The software depends on the project chosen.

Communication part (learning path from the first bachelor up to the first master's year)

- Syllabus: 'Communicatie in drie modules' (250 pages, available on via the electronic learning platform), to be used from the first bachelor's year up to the first master's year (and afterwards).
- Handbook: 'Scoren met je scriptie - Het standaardwerk voor verslagen, rapporten en projecten, off- en online' (355 pages + QR codes to instructional videos and interactive language and writing exercises) - Owl Press (<https://borgerhoff-lamberigts.be/boeken/scoren-met-je-scriptie>, ISBN 9789463937276), student price 30 euros: compulsory handbook for the communication partim on writing (reports, bachelor's thesis, master's dissertations), to be used from the first bachelor up to the first master's year (and afterwards).
- PowerPoint presentations/hand-outs/knowledge clips on writing and presenting available on the electronic learning platform.

References

Communication partim (learning path from the first bachelor up to the first master's year): 'Bij wijze van spreken – Het standaardwerk voor mondelinge communicatie' (550 pagina's) - Owl Press (<https://borgerhoff-lamberigts.be/owlpress>, ISBN 9789463934381, student price: 39,90 euros).

Course content-related study coaching

Coaching by the teaching staff.

Assessment moments

continuous assessment

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

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

Examination methods in case of permanent assessment

Peer and/or self assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Calculation of the examination mark

Overall assessment of the project based on

- product
- quality of the code
- analysis and design
- report including guidelines for installation and testing and demo video

The individual score may differ from the group score based on the input to the project.