

Interdisciplinary Project (E761043)

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 size (nominal values; actual values may depend on programme)
Credits 6.0 Study time 180 h Contact hrs 106.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	Dutch	Gent	project	96.0 h
			lecture	10.0 h

Lecturers in academic year 2020-2021

Naessens, Helga	TW05	lecturer-in-charge
Ongenaë, Veerle	TW05	co-lecturer

Offered in the following programmes in 2020-2021

	crdts	offering
Bachelor of Science in Engineering Technology (main subject Information Engineering Technology)	6	A

Teaching languages

Dutch

Keywords

Project, Communication, Computer science (P170), Informatics (P175), Computer technology (T120)

Position of the course

Partim project: To design, realize, demonstrate, and present a full-fledged multilingual desktop and/or web application as a team, applying the design and programming techniques taught in prerequisite courses.

Partim communication: To learn and master by practice written and oral communication skills in Dutch.

Contents

Partim project: Students learn to build a distributed application as a team, relying on various computer science disciplines. By using modern software development methodologies and tools, they learn to deliver a full-fledged software product in a realistic environment.

Partim communication: The theory of good presentation techniques is dealt with and profoundly mastered by practice. The students are taught what the main features are of a large report, such as a bachelor or a Master's Dissertation.

Initial competences

- To be able to implement and to apply basic algorithms and data structures.
- To be able to automate management tasks by writing scripts in perl.
- To be able to implement and to apply design patterns.
- To be able to design and to implement a database and query it using SQL-operations.
- To be able to design and to implement a GUI.
- To be able to program hardware with knowledge of architecture and knowledge of the components of modern computer systems.
- To be able to develop a web application using the .NET or the J2EE platform.
- To be able to make an advanced software design for a problem in a team.
- To be able to develop and implement a mobile app.

Final competences

- 1 To be able to analyze a large programming assignment and to build a well-structured program.
- 2 To be able to respect deadlines and agreements, and deliver a product on time.

- 3 To be able to design and to implement a distributed application with a web and/or a desktop interface.
- 4 To be able to design a database and to query it using SQL-operations.
- 5 To be able to assess which technology is a more suitable choice in a given situation.
- 6 To be able to assimilate, to implement and to use relevant existing and new technologies and/or theories.
- 7 To be able to discuss and to solve problems as a team efficiently.
- 8 To be able to communicate and to report information, ideas, problems and solutions in an efficient way (orally and in writing).
- 9 The student is able to give an effective presentation that is correct in a verbal and a nonverbal way.
- 10 The student is able to write a large report and he pays attention to the various parts of a large report, the correct language, the appropriate writing style, the attractive lay-out and the reference style.

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, project

Extra information on the teaching methods

Project work.

As a part of this course, visits to companies can be organized, with obligatory participation. As a part of this course, presence and cooperation during the open day of the Bachelor and Master of Science in industrial engineering is required.

Partim communication: Lecture with short movie and discussion in class - training in small group - peer assessment - self assessment

Learning materials and price

Partim project: All the necessary information can be found on the electronic learning platform.

Partim communication:

- Workbook: 'Communicatie in vijf modules' ('Communication in five parts') - 250 pages
- - Leen Pollefliet
- Book: 'Schrijven: van verslag tot eindwerk - do's & don'ts' ('Writing: from report to final work - do's & don'ts') - Leen Pollefliet - published by Academia Press - latest edition (= book + exercise book + dvd)
- Hand-outs of all slides and the key to all exercises in the exercise book (among others parts of a final work (dissertation), writing style, reference style) are available on Ufora.

References

Course content-related study coaching

Partim project: Coaching by the involved lecturers.

Partim communication: Lecturer is available (in the classroom and by email) for questions and extra guidance;

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, skills test, peer assessment, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is not possible

Extra information on the examination methods

Permanent assessment.

Self and peer assessment.

Assessment of methodology, product, multilingual final report and presentation.

Partim communication: The interim presentation (slides and speaker) is evaluated by the lecturer of communication: the evaluation is calculated in the final score of the

Calculation of the examination mark

Partim project: Product (analysis and design, implementation, testing, deployment, Scrum), reporting and presentation: 90%

Partim communication: 10%