GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2020-2021

Introduction to Programming (F000902)

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 5.0 **Study time** 150 h **Contact hrs** 30.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	Dutch	Gent	seminar: practical PC room classes	30.0 h
			online seminar: practical PC room classes	0.0 h

Lecturers in academic year 2020-2021

Gailly, Frederik	EB24	lecturer-in-charge

Offered in the following programmes in 2020-2021	**crdts**	**offering**
Bachelor of Science in Economics	5	A
Bachelor of Science in Business Economics	5	A

Teaching languages

Dutch

Keywords

principles of programming, programming, Java

Position of the course

In this course students get acquainted with the development of software applications. The course focuses on a programming language (Java).

Contents

1 Objects and classes
2 Class definitions
3 Interaction between objects
4 Grouping objects (e.g., ArrayList)
5 Advanced programming concepts and techniques (e.g., Random, HashMap, HashSet)
6 Collections with fixed size (arrays)

Initial competences

Understanding the fundamentals of Computer Science and information and communication technololgies. Appying abstraction and algorithmic thinking when solving data processing problems.

Final competences

Program with Java in BlueJ (limited to the application of the basic principles of Object Orientation described in Part 1 of the textbook)

Conditions for credit contract

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

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Seminar: practical PC room classes, online seminar: practical PC room classes

Extra information on the teaching methods

All sessions take place in a computer room so learning of new concepts and techniques will immediately be followed by programming exercises requiring students to apply these new concepts and techniques.

Learning materials and price

Textbook: Programmeren in Java met BlueJ by Barnes & Kölling (Pearson)
BlueJ programming environment (via Athena)
Study website: Pearson XTRA-website bij Programmeren in Java met BlueJ
Additional material available on Ufora: slides, Java projects, programming exercises, solutions, example exams

References

none

Course content-related study coaching

via Ufora: Forum, Studentenpublicaties, Dropbox
Individual guidance is possible

Evaluation methods

end-of-term evaluation

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

Open book examination, skills test

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

Open book examination, skills test

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

not applicable

Extra information on the examination methods

Open book exam on PC . The ability to program new applications with Java , with the same level of difficulty as the applications realised during the (last) class sessions, is examined.

Calculation of the examination mark

Single score for the exam

Facilities for Working Students

None