GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2023-2024

Introduction to Processing Language with Python (A704064)

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

Credits 5.0 **Study time 150 h**

Course offerings in academic year 2024-2025

Lecturers in academic year 2024-2025

De Langhe, Loic	LW22	staff member
Tezcan, Arda	LW22	lecturer-in-charge

Offered in the following programmes in 2024-2025	**crdts**	**offering**

Teaching languages

English

Keywords

Programming, Python, automatization, basic text analysis

Position of the course

This course offers an introduction to programming with Python. It does not require prior knowledge about programming. The focus of the course is on automatic text processing.
Programming skills have a number of benefits:
- An understanding of the functioning and possibilities of computer programs is becoming ever more important in a society where technology is omnipresent
- Programming trains analytical thinking and problem-solving skills
- Repetitive or data-intensive tasks can be automated with simple programs

Contents

The course deals with the following topics:
- basic concepts of programming: variables, operators, assignment, data types
- control structures: conditions, loops, recursion
- using and writing functions
- working with files and directories
- documentation and error handling

Initial competences

Basic computer skills

Final competences

1 Having general knowledge about how computer programs work
2 Having the practical knowledge and skills to develop simple computer programs
3 Capacity to break down an assignment into smaller subtasks
4 Ability to find and correct bugs in code

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

Seminar, Independent work

Study material

None

References

- Python Software Foundation. *Official Python documentation.* http://www.python.org/doc/
- Allen B. Downey. *Think Python. How to Think Like a Computer Scientist?* http://greenteapress.com/thinkpython/thinkpython.html
- Steven Bird, Ewan Klein, & Edward Loper. *Natural Language Processing with Python. Analyzing Text with the Natural Language Toolkit.* http://www.nltk.org/book

Course content-related study coaching

Discussion forum on Ufora.
Possibility to contact lecturers via e-mail

Assessment moments

end-of-term and continuous assessment

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

Skills test, Assignment

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

Skills test, Assignment

Examination methods in case of permanent assessment

Skills test, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

After 6 weeks a Skills Test will be organized, which counts for the 20% of the final score. This skills test will require hands-on-coding and will be completed in the classroom.
At the end of the course there will be a coding exam (assignment), which counts for the 80% of the final score. This exam will require hands-on-coding and will be completed in the classroom. The score of the skills test will be transferred to the second examination period, which will only consist of the coding exam.
During the semester there will be practical coding exercises, for which keys will be provided after each lesson. These exercises will not be graded but the students are encouraged to solve them.

Calculation of the examination mark

20% Skills Test (after 6 weeks)
80% Final Skills Test (during the examination period)

Facilities for Working Students

Can be requested from the learning track counsellor