GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2022-2023

Introduction to Processing Language with Python (A704064)

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** 45.0 h

Course offerings in academic year 2023-2024

A (semester 1) English Gent

Lecturers in academic year 2023-2024

De Langhe, Loic	LW22	staff member
Vanroy, Bram	LW22	lecturer-in-charge

Offered in the following programmes in 2023-2024	crdts	offering
Master of Arts in Technology for Translation and Interpreting	5	A
Master of Arts in Advanced Studies in Linguistics (main subject Natural Language Processing: Theory and Practice)	6	A
Postgraduate Certificate Computer-Assisted Language Mediation	5	A

Teaching languages

English

Keywords

Programming, Python, automatization, 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
- using external libraries, especially those developed for automatically generating Word and Excel output formats, creating simple interfaces, and webcrawling
- 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

Self-reliant study activities, seminar: practical PC room classes

Learning materials and price

Handouts and materials for download on Ufora.
Students should have a sufficiently powerful laptop and bring it with them to the class.

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 Minerva
Possibility to contact lecturers via e-mail

Evaluation methods

end-of-term evaluation and continuous assessment

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

Skills test

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

Skills test

Examination methods in case of permanent evaluation

Skills test

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

After 6 weeks a first Skills Test will be organized. If students pass this test, it will count for 20% of the final score.
During the semester there will be compulsory exercises. If students do not complete at least 80% of these exercises they cannot pass, and the maximum score will be 9/20.

Calculation of the examination mark

20% Skills Test 1 (after 6 weeks, in case students pass this test)
80% Final Skills Test (100% if students did not pass the first skills test)

Facilities for Working Students

Can be requested from the learning track counsellor