



- 1 Having the practical knowledge and skills to integrate NLP libraries in Python code
- 2 Having the practical knowledge and skills to build machine-learning models and to evaluate their performance.
- 3 Ability to apply NLP tools and machine-learning skills to large-scale programming projects

#### **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**

Practicum, Self-reliant study activities

#### **Learning materials and price**

Handouts and materials for download on Ufora.

Students should have a laptop and bring it with them to the class.

Estimated total price of learning material: 0 €

#### **References**

- Python Software Foundation. *Official Python documentation*. <http://www.python.org/doc/>
- Aurélien Géron: *Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems* (1st ed.), O'ReillyMedia, 2017.
- Steven Bird, Ewan Klein, & Edward Loper. *Natural Language Processing with Python. Analyzing Text with the Natural Language Toolkit*. <http://www.nltk.org/book>
- D. Jurafsky, J. H. Martin. *Speech and Language Processing: An Introduction to Natural Language Processing, Speech Recognition, and Computational Linguistics* (2nd ed.), Prentice-Hall, 2009.

#### **Course content-related study coaching**

Discussion forum on Ufora

Possibility to contact lecturers via e-mail

#### **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**

Assignment

#### **Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible

#### **Extra information on the examination methods**

In order to pass, students must hand in at least 80% of all assignments given after each session.

The final assignment consists of a coding project that the student defines in consultation with the teacher. Every student should be able to explain the full code of the end result of the project.

Second exam opportunity:

Assignment: same final assignment; students submit a new, improved version.

#### **Calculation of the examination mark**

Assignment (100%) [see the exception as described in Details Evaluation]

#### **Facilities for Working Students**

Class attendance is strongly recommended.

Limited possibility of feedback via e-mail, restricted to answering specific questions