

## Machine Translation and Post-editing (A704028)

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 and teaching methods in academic year 2020-2021

A (semester 1)	English	Gent	practicum	15.0 h
			self-reliant study activities	22.5 h
			lecture	7.5 h

### Lecturers in academic year 2020-2021

Macken, Lieve	LW22	lecturer-in-charge
Daems, Joke	LW22	co-lecturer

### Offered in the following programmes in 2020-2021

	crdts	offering
<a href="#">Postgraduate Certificate Computer-Assisted Language Mediation</a>	5	A

### Teaching languages

English

### Keywords

Machine translation, post-editing

### Position of the course

Machine Translation (MT) is the translation of text by a computer. To produce high-quality translations, humans still need to intervene in the process either by making the input more suitable for MT (pre-editing) or changing the output (post-editing).

### Contents

The course deals with the following topics:

- Challenges for MT;
- Architecture of MT systems (rule-based MT, statistical MT and neural MT systems; interactive and adaptive systems);
- Evaluation of MT output (automatic vs. manual evaluation methods);
- Post-editing and post-editing tools;
- Integration of MT in the translation workflow;
- Creation and evaluation of a customized MT engine.

### Initial competences

The student has a basic knowledge of English and a basic knowledge of at least one of the following languages: Dutch, French or German.

### Final competences

- 1 The student has advanced knowledge of different machine translation architectures and can, based on that knowledge, critically assess different machine translation systems;
- 2 The student has advanced knowledge of the evaluation methods that are used in the field of MT;
- 3 The student has advanced knowledge of the post-editing process and the typical MT errors;
- 4 The student has knowledge of how MT is integrated in translation workflows.
- 5 The student can critically read and assess scientific work in the field of machine translation.

**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, practicum, self-reliant study activities

**Extra information on the teaching methods**

Lectures and hands-on seminars

Guided self-study/team work at home.

**Learning materials and price**

Handouts and materials on the electronic learning platform Ufora.

Geraamde totaalprijs: 0 EUR

**References**

- Koehn, P. *Statistical Machine Translation*. Cambridge University Press, 2010
- O'Brien, S., Balling L., Carl, M. , Simard, M., Specia, L. *Post-editing of Machine Translation: Processes and Applications*. Cambridge Scholar Publishing, 2014
- Somers, H. *Computers and Translation. A Translator's guide*. Benjamins, 2003

**Course content-related study coaching**

Discussion forum on Ufora

Individual counselling after the lectures; 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****Examination methods in case of periodic evaluation during the second examination period**

Written examination with open questions

**Examination methods in case of permanent evaluation**

Assignment, skills test

**Possibilities of retake in case of permanent evaluation**

examination during the second examination period is possible

**Extra information on the examination methods****First session:**

- Skills test (50%)
- Assignment (50%)

The skills test consists of several practical assignments that are completed during the classes. The assignment consists of a more elaborate task and a report.

**Second session:**

- Written exam (100%)

**Calculation of the examination mark**

First session: skills test 50%; assignment 50%

Second session: exam 100%

In order to pass, students must participate in at least 80% of all evaluations and obligatory activities such as guest lectures. If a student is absent due to a legitimate reason, an individual alternative assignment can be given.

**Facilities for Working Students**

Class attendance is strongly recommended.

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