

ICALL for Language Engineers (A005873)

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

Credits 4.0

Study time 120 h

Course offerings in academic year 2026-2027

A (semester 2)

English

Gent

Lecturers in academic year 2026-2027

De Clercq, Orphée

LW22

lecturer-in-charge

Degraeuwe, Jasper

LW22

co-lecturer

Offered in the following programmes in 2026-2027

Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Language Technology)

crdts

4

offering

A

Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Language Technology)

4

A

Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Language Technology)

4

A

Teaching languages

English

Keywords

computer assisted language learning, NLP for educational applications

Position of the course

This course offers students a solid base in intelligent CALL and makes them familiar with present-day AI applications that can be used to support language learning. The course's focus is on hands-on experience and critical reflection.

Contents

Computer-Assisted Language Learning (CALL) emerged as a discipline within Applied Linguistics. We will start by grounding this discipline within the field and by discussing recent developments. Then, we zoom in on the domain of ICALL which stands for *intelligent* CALL. In this respect we explore which techniques from NLP and AI can be employed to support and (partially) automate language learnings and didactics.

Students will learn which intelligent applications and AI-assisted techniques exist, ranging from vocabulary learning and grammar to the four skills (listening, speaking, reading and writing). The students will not only learn how to conceptualize and implement state-of-the-art machine learning methods, but also how to critically assess and evaluate their output.

Initial competences

Introduction to Processing Language with Python

Data and Corpusmanagement with Python: Theory and Applications

NLP and Linguistic Analysis

Introduction to Machine Learning and Feature Engineering for NLP

Final competences

- 1 Knowledge of CALL as a discipline within Applied Linguistics.
- 2 Basic knowledge of and insights into various intelligent CALL applications.
- 3 Practical knowledge and skills to build, train and evaluate intelligent CALL applications.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture, Independent work

Extra information on the teaching methods

Lectures and hands-on seminars. By default, recordings are not provided. Guided self-study work at home.

This course unit assumes responsible use of generative artificial intelligence (GAI).

What this means will be explained in class.

Study material

Type: Slides

Name: ICALL for language engineers

Indicative price: Free or paid by faculty

Optional: no

Language : English

Available on Ufora : Yes

References

Course content-related study coaching

Interactive support through UFORA and during the sessions. Individual feedback will be given during the sessions, but it is also possible to book an appointment or to ask for feedback via mail.

Assessment moments

end-of-term and continuous assessment

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

Oral assessment

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

Oral assessment

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

First session:

- Presence and participation in class (10%)
- Assignment (30%)
- Oral exam including a discussion on the assignment and assessment of theoretical knowledge (60%)

Second session:

- Assignment (40%)
- Oral exam(60%)

Calculation of the examination mark

--- Klik oA combination of continuous assessment (40%) and end-of-term evaluation (60%).

First exam session: To pass, the student must achieve an overall average of 10 out of 20 or higher, with a minimum score of 40% on both the continuous and end-of-term components. If the minimum score is not obtained for either component, the student can receive a maximum final score of 9 out of 20 for the course.

Second exam session: Both components must be retaken. To pass the course, students must again achieve an overall average of 10 out of 20 or higher, with a minimum score of 40% on both components. If the minimum score is not achieved for either component, the maximum final score remains 9 out of 20.

Facilities for Working Students

- Presence in class is highly recommended.
- Opportunity to receive feedback via mail or by booking an appointment during the office hours.