



Universidad
del País Vasco
Euskal Herriko
Unibertsitatea



With the support of the
Erasmus+ Programme
of the European Union

Erasmus Mundus Master

MASTER IN LANGUAGE AND COMMUNICATION TECHNOLOGIES (LCT)

Saarland University / University of the Basque Country /
Charles University / Rijksuniversiteit Groningen / University
of Lorraine / University of Malta / University of Trento

www.ehu.eus

INTRODUCTION & OBJECTIVES

LCT is designed to meet the demands of industry and research in the rapidly growing field of language technology. It offers education and training opportunities for the next generations of leaders in research and innovation.

LCT offers three specialization tracks:

- **Language Data Science:** is aimed at students with a strong background in computer science and mathematics, familiar with AI approaches. It focuses on the application of Data Science techniques to large corpora.
- **Digital Language resources:** equips students having a strong linguistics background with insights to exploit data resources for cognitive and experimental linguistics.
- **Natural Language Algorithms and Applications:** intended mainly for students with a computer science background, revolves around machine learning techniques that are relevant to NLP e.g. parsing, generation, translation.

Double Degree: The program involves studying one year each at two of the European partner universities. After completing all study requirements, the students obtain two Master of Science/Arts degrees: one from each European university where they studied.

ENTRY PROFILE

Applicants must have a bachelor's degree or equivalent in the area of (Computational) Linguistics, Language Technology, Cognitive Sciences, Computer Science, Mathematics, Artificial Intelligence, or other relevant disciplines, subject to the consent of and the approval by the consortium's admission committee. To find out more, turn to:

https://lct-master.org/contents_2014/application.php

CAREER OPPORTUNITIES

- Research in areas of Neurolinguistic Programming: machine translation, sentiment analysis, statistical language modelling, computational linguistics, text mining.
- Professionals in fields related to language engineering, language industries and information and communication technologies (ICT) such as the following:
 - Deep learning techniques from big data.
 - Development of electronic linguistic resources: e.g. dictionaries, thesauri, ontologies, lexical databases, linguistic corpora.
 - Development of computer-assisted learning systems for e-learning and conversational systems with user-oriented adaptive ability such as smart chatbots.
 - Semantic knowledge representation and managing from the web.
 - Specialist in machine translation or speech processing.
- Research in companies: e.g. Google, Microsoft, IBM, Elhuyar, Vicomtech.

ABOUT THE COURSE

Teaching place:

The program involves studying one year each at two of the European partner universities.

- University of the Basque Country; Faculty of Computer Engineering (Donostia-San Sebastian); Saarland University (Saarbruecken, Germany); University of Malta (Malta), University of Trento (Trent, Italy); University of Lorraine (Nancy, France); Charles University (Prague, Czech Republic); Rijksuniversiteit Groningen (Groningen, The Netherlands).

Teaching type:

On-site.

Teaching language:

English.

Approximate fees:

- For non-European students, the program fees are in the amount of Euro 8,500 per year.
- For European students, the program fees are in the amount of Euro 4,250 per year.
- A limited number of partial fee waivers may be available for individual intakes.
- Erasmus Mundus scholarships.

The program offers the following categories of scholarships:

- Non-European for students selected by EMMC consortia who come from a country other than an EU member state or Programme country and who are not residents nor have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in one of these countries.
- European for students selected by EMMC consortia and who are residents or nationals of any of the EU Member countries, Programme country, i.e. a country fully participating to the programme on the same grounds as EU Member States, or other nationals who have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in one of these countries. Students from Turkey, FYROM, Iceland, Liechtenstein, Norway and Serbia will be considered as nationals from a Programme country.

Calendar:

From October to June, in the afternoon.

TEACHING LOAD

Compulsory subject courses	Optional subject courses	Research Projects	Internships	Total
30 Credits ECTS	50 Credits ECTS	30 Credits ECTS	10 Credits ECTS	120 Credits ECTS

TRAINING SYLLABUS

The modular curriculum consists of four components (120 ECTS):

- Core modules (30ECTS) ensure that the students obtain a solid common foundation designed to cover all areas necessary for working in LCT, including theoretical as well as practical skills; the number of credits for the various modules differs depending on the students' background. Core modules are normally taken during the first year.
- (B) Specialized modules complement the common core. We offer three tracks (of 30 ECTS each) with different incoming pre-requisites and that prepare students for different career possibilities.
- (C) Free choice courses (10-15 ECTS), soft skills courses (5-9 ECTS) and an internship (6-15 ECTS) reflect current trends and hot research and employment areas.
- (D) Joint programme events: e.g. the internal summer school takes place before the start of each academic year.
- (E) Master thesis (30 ECTS) rounds off the learning experience with an independent project, which can be carried out at the university or as an internship.

CONTACT

Academic information:

Academic Manager: Alicia Pérez

Phone: +34 94 601 7432

Email: emlct@ehu.eus

Information: Oihana Imaz

Phone: +34 943 018564

Email: oihana.imaz@ehu.eus

PARTNERS WITH A COOPERATION AGREEMENT

- Deutsches Forschungszentrum für Künstliche Intelligenz GmbH (DFKI)
- Fondazione Bruno Kessler
- Fundación Centro de Tecnologías de Interacción Visual y Comunicaciones -VICOMTECH
- IBM Česká republika spol. s.r.o.
- IBM Ireland Limited
- Institut National de Recherche en Informatique et Automatique (INRIA)
- Nuance Communications Deutschland
- SONY Europe Limited



<http://go.ehu.eus/erasmusmundusmasterlct>



<https://lct-master.org>

