

LCT

European Masters Program in Language and Communication Technologies

Duration: 2 years

Course description:

The European Masters Program in Language and Communication Technologies (LCT) is designed to meet the demands of industry and research in a rapidly growing area. It offers education and training opportunities for the next generation of leaders in research and innovation. It provides students with profound knowledge and insight into the various disciplines that contribute to the methods of language and communication technologies and it strengthens their ability to work according to scientific methods. Moreover, the students also acquire practice-oriented knowledge by choosing appropriate combinations of modules in language technology, computational linguistics and computer science. The language of instruction is English (default).

LCT consists of Core Modules and Specialised Modules in Language Technology (LT) and Computer Science (CS), complemented by a Project, and a Masters thesis, for a total of 120 ECTS credits.

The Language Technology Core Modules (24 ECTS credits) include (a) the Foundational Module, which covers topics such as statistical methods, symbolic methods, cognition, corpus linguistics, text and speech, foundations of Linguistics, (b) the Computational Syntax and Morphology Module, which covers topics such as Finite State Techniques, probabilistic approaches, formal grammars, tagging, chunking, parsing, and (c) the Computational Semantics, Pragmatics and Discourse Module, which covers topics such as Syntax-Semantics Interface, semantic construction, dialogue, ontologies, formal semantics.

The Computer Science Core Modules (24 ECTS credits) include (a) the Data Structures, Data Organisation and Processing Module, covering topics such as algebraic data-types, relational databases, semi-structured data and XML, Information Retrieval (IR), digital libraries, (b) the Logic, Computability and Complexity Module, covering topics such as logic and inference, automata theory, computability theory, complexity theory, discrete mathematics, and (c) the Formal Languages and Algorithms Module, covering topics such as formal grammars and language hierarchy, parsing and compiler design, search techniques and constraint resolution, automated learning.

The Specialised Modules consist of 42 ECTS credits in LT and CS. These modules are based on the specific strengths in research and teaching of the partner institutions. From the 42 ECTS credits of this category of modules, 15 may be devoted to a project. The research masters thesis consists of 30 ECTS credit points.

The integrated study program is distributed among the Free University of Bozen-Bolzano (FUB), the University of Malta (UoM), the University of Nancy 2 (Nancy 2), the Charles University in Prague, Saarland University (UdS; Coordinator), and the University of Groningen (RuG).

Students study at two universities and receive a double masters degree, which is officially recognised by the university authorities of all the partners. The awarded degrees are officially recognised degrees in the issuing countries. The program ensures that all students receive a common education that covers the core topics in LCT, but their specific scientific profile is shaped by the pair of Universities chosen for the first and second year of their studies.

Applicants must satisfy the following study requirements: a Bachelor degree or equivalent in the area of (Computational) Linguistics, Language Technology, Cognitive Sciences, Computer Science, Mathematics, Artificial Intelligence, or other relevant disciplines; non-native speakers submit proof of knowledge of English such as the Toefl certificate (>79/550), or Cambridge Proficiency Exam (pass), or IELTS (>6.5).

Website: <http://lct-master.org>

Partners:

Saarland University, Germany (Co-ordinating institution)
Charles University of Prague, Czech Republic
University of Nancy 2, France
Free University of Bolzano – Bozen, Italy
University of Malta, Malta
University of Groningen, Netherlands

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