

# LING2MS

Master en linguistique, à finalité spécialisée en ingénierie linguistique (Master of Linguistics, leading to specialisation in Linguistic Engineering)



#### **Programme management**

**CLIG** Commission de gestion des diplômes en linguistique **Responsable académique :**Cédrick Fairon **Contact :**Annie Troost

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### Study objectives

The Master's programme in Linguistics aims to provide the students with in-depth training in General and Applied Linguistics. It offers a vast choice from among numerous specialisations. The programme gives an excellent basis for students who are interested in scientific and linguistic research. In addition, this master can likewise orientate the students towards professions in the domains of linguistic engineering, written and oral communication, dictionary work and specialised terminology etc. The targeted specialisation in Linguistics Engineering is the fruit of a collaboration with the following institutions : FUNDP (Namur), FPMs (Mons), and KULeuven. It aims to train the students in the methods and concepts essential for the automatic processing of a natural language (written and oral) while enabling them to acquire and deepen the computer knowledge necessary in this domain. This line of studies opens up access to the job market of language industries (processing of intelligent texts, man-machine vocal/textual interfaces, help tools for the management and translation of documents, documentary navigation, educational soft-ware, electronic dictionaries and grammar books, etc) or paves the way for doctoral research. Complementary Information : http://ling.fltr.ucl.ac.be/form/master/geli/

#### Admission conditions

Subject to the conditions fixed by the Faculty authorities, access to this programme is granted to university graduates or to students who have enrolled for their last year of undergraduate studies. In the case of the latter, the master's degree can only be obtained after the awwarding of the bachelor's degree .

#### Admission procedures

The University admission and enrolment procedures are detailed under the section heading "General Information" on the WEB page : http://www.ucl.ac.be/etudes/programme.html

### General structure of the programme

This two year programme consists of :

- a core syllabus (60 credits) including an introduction to linguistics courses (32 credits), a thesis and a period of work experience (28 credits);
- a specialisation (30 credits) in Linguistics Engineering ;
- an option (30 credits) related to the specialisation.
- Dispensations may be granted for candidates who manage to have their equivalences validated.

#### **Programme content**

A Core syllabus (32 credits) Introduction to General Linguistics					
or					
CLIG2120	Linguistic semantics and general semiotics[30h] (4.5 credits)	N.			
	$\underline{\Lambda}$ (in French)				
CLIG2190	Introduction to the quantitative analysis of linguistic	Cédrick Fairon			
	data[30h] (4 credits) (in French)				
	Natural lan arrange and accessing [20h] (A and dita) (in Energh)	Cádriala Esimon			
ΓL1K2020	natural language processing 50n (4 credits) (in French)	Cedrick Fairon			

<u>ESPO2102</u> <u>ROM2371</u>	Statistics[30h+15h] (5 credits) (in French) Seminar: French Linguistics I[15h] (3 credits) 🟹 (in French)	Dominique Deprins Michel Francard, Anne-Catherine Simon
<u>ROM2140</u>	French Linguistics : general issues in syntax[30h] (4 credits) (in French)	Anne-Catherine Simon
<u>ROM2170</u>	French Linguistics : further issues in Lexicology[30h] (4 credits) (in French)	Jean Klein
FILO2220 B. Specialisation in Module 1 : Compu	Philosophy of language[30h] (4 credits) (in French) Linguistics Engineering (30 credits) ter Studies (15 credits)	Marcel Crabbé
LINF2121	Algorithmics and data structures[30h+30h] (5 credits) (in French)	Pierre Dupont (coord.), Baudouin Le Charlier, Kim Mens
<u>LINF2125</u>	Projet de programmation : application de gestion[0h+60h] (5 credits) (in French)	Marco Saerens
<u>INGI2271</u>	Database management systems[30h+30h] (5 credits) (in French)	Alain Pirotte (coord.), Marco Saerens
Module 2 : Automa	atic Language processing (15 credits)	
FLTR2630	Introduction to automatic text processing[30h] (6 credits) (in French)	Cédrick Fairon
<u>GELI2009</u>	Panorama des applications de l'ingénierie linguistique[30h] (5 credits) (in French)	N.
<u>GELI2003</u>	Introduction aux méthodes et concepts essentiels d'ingénierie linguistique (cours FUNDP : INFO 2327)[30h] (4 credits) (in French)	N.
<u>GELI2005</u>	Introduction au traitement de la parole (cours FPMS)[15h] (3 credits) (in French)	N.
C. Option (30 credi	its)	
The first four course	are compulsory for students who have not followed any equiv	alant tuition .
<u>SINF1150A</u>	Introduction à l'algorithmique et programmation A[30h+30h] (6 credits) $\underline{A}$ (in French)	Baudouin Le Charlier
<u>SINF1150B</u>	Introduction à l'algorithmique et programmation $B[30h+30h]$ (6 credits) $\underline{\Lambda}$ (in French)	Baudouin Le Charlier
<u>GETI2101</u>	Information systems analysis and design[65h] (7.5 credits) (in French)	Manuel Kolp, Alain Pirotte
or		
<u>GELI2023</u>	Bases de données dans les systèmes d'information (FUNDP - DGTI3123)[30h] (3 credits) $\underline{\Lambda}$ (in French)	N.
<u>GELI2001</u>	Compléments de mathématiques (cours FPMS - EAD)[40h] (5 credits) (in French)	N.
<u>SINF1252</u>	Introduction to computer systems[30h+30h] (6 credits) (in French)	Marc Lobelle
<u>INGI2132</u>	Languages and translators[30h+30h] (5 credits) (in French)	Baudouin Le Charlier (coord.), Peter Van Rov
LINE2356	Interfaces homme-machine[45h] (4 credits) (in French)	Jean Vanderdonckt
<u>EII (1 2550</u> STAT2550	Data Mining[15h+15h] (5 credits) (in French)	Libei Chen
<u>ELEC2930</u>	Intoduction to telecommunication[30h+15h] (4 credits) (in	Auguste Laloux
<u>CLIG2140</u>	French) Séminaire de linguistique computationnelle[30h] (4 credits) $\underline{\Lambda}$ (in French)	N.
<u>GERM2218</u>	English linguistics seminar : corpus linguistics[15h] (4 credits) (in English)	Fanny Meunier
KULeuven		
The following cours	es at KUL may likewise be chosen as an option :	
LING2001	Text based information retrieval (KUL - H0J61)[28h] (4 credits) $\underline{\Lambda}$ (in French)	N.
LING2002	Natural language Processing (KUL - H0C28A)[32.5h] (4 credits) $\underline{A}$ (in French)	N.
LING2003	Linguistic theories and artificial intelligence (KUL - H0D36A)[32.5h] (4 credits) $\underline{\Lambda}$ (in French)	N.
<u>GELI2024</u>	Language Engineering Applications (KUL - H0J65A)[32.5h]	N.

	(4 credits) $\underline{\Lambda}$ (in French)	
<u>GELI2025</u>	Foundations of Formal Theories of language (KUL - W098)[26h] (4 credits) $\underline{\Lambda}$ (in French)	N.
GELI2026	Taaltechnologie (KUL - F430)[30h] (4 credits) A (in	N.
<u>GELI2027</u>	French) Toepassingen van computerlinguïstiek (KUL - G383)[60h] (8 credits) <u>A</u> (in French)	N.

# E. Thesis and apprenticeship (28 credits)

The student will complete an apprenticeship in a research laboratory (in a university or in industry) for a minimum of 7 weeks (14 weeks part-time). A list of teams ready to welcome the students will be available at the secretary's office. Depending on the availability of the research teams, this period will take place preferably during the second semester of the first year or during the first semester of the second year.

The student must present a thesis (50 to 100 pages) on a linguistic subject relating to the subject matter taught in the context of the degree, preferably in the prolongation of his work experience in a research laboratory.