

COMPUTATIONAL LINGUISTICS, MA

Computational Linguistics is a field that appeals to students with a zeal for both linguistics and computer science and a passion for developing ideas at the intersection of these fields. The program relies on the resources of the linguistics program and the department of computer science. Students studying computational linguistics will focus on the scientific study of language from a computational perspective, in which opportunities abound in many growing fields in today's job market, such as:

- Automated text analysis
- Speech recognition
- Information retrieval
- Web search
- Machine translation
- "Big Data"
- Cryptography
- Computer security

The program admits a small-sized class size of three to five, composed of (i) Tulane undergraduate students with a background in either linguistics, computer science or the study of language who are admitted into the 4+1 program, and (ii) external outstanding students, preferably with an undergraduate degree in linguistics, computer science or the study of a language.

Requirements

Students will complete a core curriculum, several electives and an internship in the summer.

Course ID	Title	Credits
Required Core Courses ¹		
ANTH 7590	Syntactic Theory	3
ANTH 7630	Linguistic Phonetics	3
CMPS 6140	Intro Artificial Intelligence	3
CMPS 6730	Natural Language Processing	3
or LING 6500	Textual Computation	
Electives (Choose 6)		18
Select from the MA Computational Linguistics electives below ²		
Summer Internship (non-course requirement) ³		
Total Credit Hours		30

¹ CMPS 2170 Intro to Discrete Math (3 c.h.) must be taken during students' undergraduate training for it is a prerequisite for some Computer Science graduate courses.

² Additional linguistic electives at the graduate level are available in the following cooperating departments: French, Spanish, Philosophy, Neuroscience, and Psychology.

³ **Non-course requirement of the curriculum**

There will be a (6-8 week) summer internship requirement for obtaining practical experience on key applications in human language technology. Local internship opportunities are available through TurboSquid, a web-based technology company in New Orleans. A written report summarizing the internship experience is required after the internship.

MA Computational Linguistics Courses:

Course ID	Title	Credits
ANTH 7340	Dialectology	3
ANTH 7640	Phonology	3
ANTH 7650	Morphology	3
ANTH 7660	Discourse Analysis	3
ANTH 7670	Language & Acquisition	3
ANTH 7680	Language and Power	3
ANTH 7690	Language and Gender	3
CMPS 6100	Introduction to Computer Science	3

CMPS 6340	Introduction to Deep Learning	3
CMPS 6610	Algorithms	3
CMPS 6620	Artificial Intelligence	3
CMPS 6770	Operating Systems	3
CMPS 6790	Data Science	3
LING 6700	Applied Second Language Acquisition	3
LING 7010	Semantics	3

Program String and Field of Study: LAMA_GR, CMPL

Contact

For more information, contact the School of Liberal Arts (<https://liberalarts.tulane.edu/linguistics/contact-us/>).