

Computational Linguistics

Be visionary. Be pioneering. Be successful.

The Computational Linguistics, Analytics, Search and Informatics master's degree is an interdisciplinary degree that provides a solid foundation in both computer science and linguistics graduate course work as well as several courses focused on data-driven linguistics, computational linguistics and information processing.



Become a specialist in the application of computers to the processing of natural languages such as English, Chinese, Arabic and Urdu.

Gain the skills needed to run and retrain off-the-shelf NLP tools, modifying them as needed.

Take validated machine learning approaches, including deep learning, either with or without linguistic annotation as training data, and extend them to new domains and new genres as well as new linguistic phenomena using appropriate evaluation methodologies.

Learn and work with world-class faculty such as Martha Palmer, an ACL fellow known for her work in semantics and linguistic annotation, Jim Martin, who along with Dan Jurafsky, wrote the textbook *Speech and Language Processing*, the premier text in the field, and Jordan Boyd-Graber, Michael Paul and Mans Hulden.

Master's Degree

Admission Requirements

- ▶ Undergraduate degree in computer science, linguistics, math or science from an accredited institution comparable to the University of Colorado
- ▶ Minimum GPA of 2.75
- ▶ GRE Scores
- ▶ TOEFL scores (international students)
- ▶ 4 letters of recommendation
- ▶ We recommend 3 semesters of mathematics at the upper-division level of calculus or above
- ▶ Considerable programming experience
- ▶ 4 semesters or more of computer science courses beyond the introductory level including Data Structures, Programming Languages and Algorithms

Focus Areas

- ▶ 9 credit hours in computer science covering programming and machine learning
- ▶ 9 credit hours in linguistics covering syntax, phonetics and semantics and pragmatics
- ▶ 9 credit hours in computational linguistics covering natural language processing, computational lexical semantics and computational phonology and morphology
- ▶ 3 credit hours of electives in information retrieval, formal semantics and more

Completion

- ▶ The MS is 32 credit hours and may be completed in 24–48 months.
- ▶ Most courses are 3 credits, are 16 weeks long and must be taken during the fall, spring or summer academic terms.

Application Deadline

- ▶ Fall admission only: December 15



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UNIVERSITY OF COLORADO **BOULDER**

Be Boulder.
Anywhere