COMPUTATIONAL LINGUISTICS - MASTER OF SCIENCE (MS)

The computational linguistics, analytics, search and informatics (CLASIC) program 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.

Distance Education

Students can take individual courses toward a master's degree through distance education (online), although linguistics courses are not currently offered online. For more information, connect with the graduate program advisor or visit CU Boulder Connect’s Master’s Programs (http://www.colorado.edu/graduateschool/admissions/distance-education/masters-programs) webpage.

Requirements

Students must complete at least 32 hours of approved graduate study, including a 2-credit capstone course focused on a publishable research project, which will run in conjunction with an internship or CU-based research project. As part of the capstone, students will be evaluated by their employer or industry project manager. Students will also prepare a technical report on the completed project that the program directors and project leader will jointly evaluate.

Required Courses and Semester Credit Hours

<table>
<thead>
<tr>
<th>Core Linguistics Courses</th>
<th>LING 5030 Linguistic Phonetics 3</th>
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<tbody>
<tr>
<td></td>
<td>LING 5420 Morphology and Syntax 3</td>
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<tr>
<td>or LING 6450 Syntactic Analysis</td>
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<td></td>
<td>LING 5430 Semantics and Pragmatics 3</td>
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<tr>
<td>Core Computer Science Courses</td>
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<td>Choose three of the following:</td>
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<tr>
<td></td>
<td>CSCI 5417 Information Retrieval Systems 9</td>
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<td>or CSCI 5817 Database Systems</td>
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<td></td>
<td>CSCI 5454 Design and Analysis of Algorithms 9</td>
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<tr>
<td>or CSCI 5444 Introduction to Theory of Computation</td>
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<td>or CSCI 5714 Formal Languages</td>
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<td></td>
<td>CSCI 5535 Fundamental Concepts of Programming Languages 9</td>
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<tr>
<td></td>
<td>CSCI 5606 Principles of Numerical Computation 9</td>
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<tr>
<td>or CSCI 5644 Numerical Linear Algebra</td>
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<td></td>
<td>CSCI 5839 User-Centered Design and Development 1</td>
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<tr>
<td>CLASIC Core</td>
<td>CSCI/LING 5832 Natural Language Processing 3</td>
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<tr>
<td></td>
<td>CSCI 7000/ LING 7800 Current Topics in Computer Science (Computational Lexical Semantics) 4</td>
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<td></td>
<td>CSCI 7000/ LING 7800 Current Topics in Computer Science (Capstone Project) 2</td>
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<td>Choose one of the following:</td>
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<td>LING 6520 Topics in Comparative Linguistics (Computational Grammars) 3</td>
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Total Credit Hours 30

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<tr>
<th>CSCI 6302</th>
<th>Speech Recognition and Synthesis</th>
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<tr>
<td>LING 6300/3800</td>
<td>Topics in Language Use (Formal Models of Linguistics)</td>
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<tr>
<td>LING 7800</td>
<td>Open Topics in Linguistics (Computational Phonology and Morphology)</td>
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<tr>
<td>CSCI 7222</td>
<td>Topics in Nonsymbolic Artificial Intelligence (Representation Learning for Language)</td>
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