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**MS in Computational Linguistics**

**Program Planning Worksheet**

Department of Linguistics

The Computational Linguistics MS program at Rochester trains students to be conversant both in the analysis of language and in computational techniques applied to natural language. The curriculum consists of courses in linguistics and computer science for a total of 32 credit hours. Four courses (16 credits) are required in linguistics and four courses (16 credits) in computer science. The degree further requires a culminating special written project on a topic relevant to the student’s interest and in consultation with individual advisors.

**Linguistics courses (16 credits)**

**Prerequisites**

* LING 110: Introduction to Linguistic Analysis

Within linguistics, students will work with an adviser to create a “track” for their coursework in one of three areas:

* Sound structure (LING 410, 427)
* Grammar structure (LING 420, 460, 461, 462)
* Meaning (LING 425, 465, 466, 468)

Students will be encouraged to take LING 450 and LING 501 as it suits their programs.

**Required**

At least one of the following:

* LING 410: Introduction to Sound Systems
* LING 420: Introduction to Grammatical Systems
* LING 425: Introduction to Semantic Analysis

Plus at least two of the following (some may have prerequisites):

* LING 427: Topics in Phonetics and Phonology
* LING 450: Data Science for Linguistics
* LING 460: Syntactic Theory
* LING 461: Phrase Structure Grammar
* LING 462: Topics in Experimental Syntax
* LING 465: Formal Semantics
* LING 466: Pragmatics
* LING 468: Computational Semantics
* LING 481: Statistical Methods in Computational Linguistics
* LING 482: Deep Learning Methods in Computational Linguistics

**Computer Science courses (16 credits)**

**Prerequisites**

Students are required to have completed the following prerequisite courses, or their equivalents:

* CSC 171: The Science of Programming
* CSC 172: The Science of Data Structures
* CSC 173: Computation and Formal Systems
* MATH 150: Discrete Math
* MATH 165: Linear Algebra with Differential Equations

**Required**

Two of the following:

* LING 424: Introduction to Computational Linguistics
* CSC 447: Natural Language Processing
* CSC 448: Statistical Speech & Language Processing

Plus two of the following (some may have prerequisites):

* CSC 440: Data Mining
* CSC 442: Artificial Intelligence
* CSC 444: Logical Foundations of Artificial Intelligence
* CSC 446: Machine Learning

**Program planning**

Complete this planning worksheet with your program advisor, keeping the above requirements in mind.

Student name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ URID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Advisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Entry term: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Complete term: \_\_\_\_\_\_\_\_\_\_\_\_\_

Complete the semester-by-semester schedule below. Your choices don’t need to be final; this is only to put together an initial program of study based on meeting the program’s requirements and exploring your linguistic interests.

Also, this is a sample schedule, so it may differ slightly depending on your specific situation. For example, you might have enough credits to avoid taking a placeholder course that’s in the outline below.

**Important notes:**

* LING 897 can only be taken once. To take LING 897 in your fourth semester and avoid the fee for LING 899, you could either register for one credit of research, independent study, or internship, or you could register for one credit of Supervised Teaching (only if you’re a TA that semester). For more information about LING 897/899, see the placeholder policies on our website.

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| --- | --- | --- | --- |
| Fall 1 | Spring 1 | Fall 2 | Spring 2 |
|  |  |  | LING 899: Master’s Dissertation |
|  |  |  |  |
|  |  | LING 897: Master’s Dissertation |  |