CLASIC Curriculum

Required Courses and Credits

Core Linguistics Courses - 2 of these 3 courses + 1 elective   9 credits

LING 5030	Phonetics
LING 5420	Morphology and Syntax (alt: LING 6450 Syntactic Analysis)
LING 5430	Semantics and Pragmatics

Elective: any advisor approved LING class at the 5000-, 6000- or 7000-level

Core Computer Science Courses - 3 courses   9 credits

CLASIC students choose from graduate "breadth" courses offered in the 3 different breadth bins. NLP **CSCI/LING 5832** is a required **Core CLASIC** course from Bin 2; one course from Bin 3 is required; the third course can be from any of the bins. Visit the computer science department website for a full list of course options in each of the 3 breadth bins. (Updated every two years.)

*CSCI areas: Artificial Intelligence; Database systems; Gen Comp. Science; Graphics; Numerical Computation; Operating systems and Hardware; Programming Languages; Software Engineering; Theory of Computation

Bin 1	
Recommended options:	
CSCI 5454	Design and Analysis of Algorithms
or CSCI 5444	Introduction to Theory of Computation
or CSCI 5714	Formal Languages
CSCI 5606	Principles of Numerical Computation
or CSCI 5646	Numerical Linear Algebra

Bin 3 (choose one)	
Recommended options:	
CSCI 5253	Datacenter Scale Computing - Methods, Systems and Techniques
CSCI 5448	Object-Oriented Analysis and Design
CSCI 5535	Fundamental Concepts of Programming Languages

CLASIC Capstone   2 credits

| LING/CSCI 5140 | CLASIC Capstone |

Core CLASIC Courses - 5 courses: 3 required & 2 electives   12 credits

CSCI/LING 5832	Natural Language Processing (required, 3 credits included above in CS)
Choose two, required:	
CSCI 7000/LING 7800	Current Topics in Computer Science (Computational Lexical Semantics)
CSCI 7000/LING 7800	Computational Models of Discourse (prereq. LING 5832)
CSCI/LING 7565	Computational Phonology and Morphology

Elective Courses - Choose two of the following

CSCI 5417	Information Retrieval Systems
CSCI 5817	Database systems
CSCI 5352	Network Analysis and Modeling
CSCI 5502	Data Mining
CSCI 5622	Machine Learning
CSCI 5839	User-Centered Design & Development 1
CSCI 5922	Neural Networks and Deep Learning
CSCI 6622	Advanced Machine Learning
CSCI 7000	Current Topics in Computer Science (Inference, Models & Simulation for Complex Systems)
CSCI 7222	Topics in Nonsymbolic Artificial Intelligence (Probabilistic Models of Human & Machine Intelligence)
CSCI 7222	Topics in Nonsymbolic Artificial Intelligence (Representation Learning for Language)
LING 5200	Introduction to Computational Corpus Linguistics
LING 5800	Open Topics in Linguistics (Machine Learning and Linguistics)
LING 6300/3800	Topics in Language Use (Formal Models of Linguistics)
LING 6520	Topics in Comparative Linguistics (Computational Grammars)
PHIL 5440	Topics in Logic
PHIL 5460	Modal Logic
Any other CSCI or LING course at the 5000-, 6000- or 7000-level*	
Any Core course listed above (not already taken)	

*The Professional Internship course LING 6930 (see 5.6 below) cannot count as an elective towards program requirements.