

BS in Computer Science and Linguistics

Admissions Requirements

In order to be considered for admission to the BS in Computer Science and Linguistics, students must have: At least one C and one B in MATH 180 and CS 111/CS 112/CS 113 with an average math/science/engineering GPA of 2.50/4.00, and at least a B in LING 150. Prior to completing these requirements, students may declare "pre-Computer Science and Linguistics" only. Transfer students who are admitted to UIC with all academic requirements complete should speak with their academic advisor at orientation about next steps. The College of Liberal Arts and Sciences reserves the right to restrict the enrollment of students into its academic programs based on space availability

Degree Requirements

To earn a Bachelor of Science in Computer Science and Linguistics degree from UIC, students need to complete university, college, and department degree requirements. The degree requirements for the BS in Computer Science and Linguistics are outlined below. Students should consult the [College of Liberal Arts and Sciences](#) section for additional degree requirements and college academic policies.

Code	Title	Hours
Summary of Requirements		
	Requirements for the Curriculum	120
Total Hours		120

Requirements for the Curriculum

The requirements for the curriculum include the courses necessary to complete the General Education and Writing-in-the-Discipline requirements described in the College of Liberal Arts and Sciences section of the catalog

Code	Title	Hours
Required Courses		
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
	Foreign Language (the equivalent of two years of a single language at the college level)	0-16
	Exploring World Cultures course ^a	3
	Understanding the Creative Arts course ^a	3
	Understanding the Past course ^a	3
	Two Analyzing the Natural World courses (classes with labs only) ^a	8-10
MATH 180	Calculus I ^{b,c}	4
MATH 181	Calculus II ^c	4
STAT 381	Applied Statistical Methods I	3
	Select one of the following:	3
CS 111	Program Design I	
CS 112	Program Design I in the Context of Biological Problems	

CS 113	Program Design I in the Context of Law and Public Policy	
CS 141	Program Design II	3
CS 151	Mathematical Foundations of Computing	3
CS 211	Programming Practicum	3
CS 251	Data Structures	4
CS 421	Natural Language Processing	3
LING 150	Introduction to the Study of Language ^d	3
LING 160	Language and Society ^e	3
LING 210	Introduction to Natural Language Syntax	3
LING 220	Introduction to Phonetics and Phonology	3
LING 230	Semantics, Pragmatics, and Discourse ^f	3
	Select one of the following:	3
CS 301	Languages and Automata	
MCS 441	Theory of Computation I ^g	
	Select two courses from the following:	6
CS 342	Software Design	
CS/MCS 401	Computer Algorithms I	
CS 411	Artificial Intelligence I	
CS 412	Introduction to Machine Learning	
CS 418	Introduction to Data Science	
CS 422	User Interface Design and Programming	
	Select one additional CS elective among the selective list (CS 342, CS/MCS 401, CS 411, CS 412, CS 418, or CS 422), or any other CS course at the 400 level for which the student has proper prerequisites (or MCS 421, MCS 423, or MCS 425)	3
	Select three courses from the following: ^h	9
LING 260	Language Acquisition, Language Contact and Bilingualism	
LING 300	Seminar in Linguistic Analysis ⁱ	
LING 310	Language and Discrimination	
LING 320	Linguistics and Speech-Language Pathology	
LING/CHIN 330	A Linguistic Introduction to Chinese	
LING 340	Vocabulary in Action: How do we learn, process, and use words as multilinguals?	
LING 350	Are Algorithms Biased	
LING 360	Basic Statistics for Language Research	
LING 370	Introduction to Computational Linguistics	
LING 440	Language and Gender	
LING 459	Topics in Linguistics ⁱ	
LING 483	Methodology of Second Language Teaching	
LING 487	Computer Assisted Language Learning	
PHIL 206	Introduction to the Philosophy of Language	
SPAN 361	The Structure of Spanish ^j	
SPAN 362	Sounds of Spanish ^j	

SPAN 363	Spanish in Society ^j	
SPAN 365	Meaning in Language ^j	
Electives		13-31
Total Hours		120

- a *Students should consult the General Education section of the catalog for a list of approved courses.*
- b *MATH 180 fulfills the LAS Quantitative Reasoning requirement.*
- c *These courses are approved for the Analyzing the Natural World General Education category (without lab).*
- d *LING 150 fulfills the Individual and Society general education requirement.*
- e *LING 160 fulfills the Understanding U.S. Society general education requirement.*
- f *LING 230 fulfills the LAS Writing-in-the-Discipline requirement.*
- g *MCS 441 has a prerequisite of MATH 215.*
- h *Two of these three courses (6 hours) must be at the 300 level or above, and at least one course at the 300 level (or above) must come from LING.*
- i *A maximum of 6 hours of LING 300 and a maximum of 6 hours of LING 459 may count toward this requirement.*
- j *This course is taught in Spanish.*

Recommended Plan of Study

Course	Title	Hours
First Year		
Fall Semester		
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
MATH 180	Calculus I	4
CS 111	Program Design I	3
or CS 112	or Program Design I in the Context of Biological Problems	
or CS 113	or Program Design I in the Context of Law and Public Policy	
LING 150	Introduction to the Study of Language	3
Understanding the Past course		3
Hours		16
Spring Semester		
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
MATH 181	Calculus II	4
CS 141	Program Design II	3
LING 160	Language and Society	3
Hours		13
Second Year		
Fall Semester		
STAT 381	Applied Statistical Methods I	3
CS 151	Mathematical Foundations of Computing	3
CS 211	Programming Practicum	3
Foreign Language		4
Understanding the Creative Arts course		3
Hours		16
Spring Semester		
CS 251	Data Structures	4
CS 301	Languages and Automata	3
LING 210	Introduction to Natural Language Syntax	3
Foreign Language		4
Hours		14
Third Year		
Fall Semester		
CS Selective or CS 421 ^a		3

LING Selective or LING 230 ^b	3	
Foreign Language	4	
Analyzing the Natural World course (with lab)	4-5	
Hours		
14-15		
Spring Semester		
LING 210 or LING 220	Introduction to Natural Language Syntax or Introduction to Phonetics and Phonology	3
CS Selective or CS 421 ^a		3
Foreign Language		4
Electives		5
Hours		15
Fourth Year		
Fall Semester		
LING Selective or LING 230 ^b		3
CS Selective ^a		3
LING Selective ^b		3
Analyzing the Natural World course (with lab)		4-5
Elective		2
Hours		15-16
Spring Semester		
LING Selective ^b		3
CS Elective		3
Exploring World Cultures course		3
Electives		6
Hours		15
Total Hours		120

- a *Must complete two of the following: CS 342, CS 411, CS 412, CS 418, CS 422, or MCS 401/CS 401.*
- b *Must complete three of the following: LING 260, LING 300, LING 310, LING 320, LING 330/CHIN 330, LING 340, LING 350, LING 360, LING 370, LING 440, LING 459, LING 483, LING 487, PHIL 206, SPAN 361, SPAN 362, SPAN 363, SPAN 365.*