

Board Meeting  
May 21, 2020

ESTABLISH THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND LINGUISTICS, COLLEGE OF LIBERAL ARTS AND SCIENCES, CHICAGO

**Action:** Establish the Bachelor of Science in Computer Science and Linguistics, College of Liberal Arts and Sciences

**Funding:** No New Funding Required

The Chancellor, University of Illinois at Chicago, and Vice President, University of Illinois with the advice of the Chicago Senate and the College of Liberal Arts and Sciences recommends the establishment of the Bachelor of Science in Computer Science and Linguistics.

In collaboration with the Department of Computer Science in the College of Engineering, the College of Liberal Arts and Sciences (LAS) has designed a degree framework to facilitate the creation of degree programs that will prepare students to pursue technical or professional careers in arts and sciences areas requiring a sound grounding in computer science. Similar frameworks exist at institutions across the country, including the University of Illinois at Urbana-Champaign. The required framework for the B.S. in Computer Science and (LAS Discipline) programs will require 120 total hours, including: 11 hours in math and statistics, 32 hours in computer science, and 24 hours in the relevant LAS discipline. Students will be required to meet university and LAS general education requirements.

The B.S. in Computer Science and Linguistics responds to increasing demand for computational skills in various disciplines that include an aspect of language (e.g., speech recognition and synthesis, machine-human interaction, social network analysis) or more direct work with language analysis using computational tools (e.g., documentation of indigenous languages, language learning apps, health care communication). Presently, UIC students interested in fields that combine aspects of computation and language only have the option of pursuing the Minor in Linguistics to complement their computer science training.

In order to be considered for admission to the B.S. in Computer Science and Linguistics, students must have a grade of at least a C in MATH 180: Calculus I and CS 111: Program Design I, an average math/science grade point average of a 2.5/4.0, and a grade of at least a B in LING 150: Introduction to the Study of Language. The colleges anticipate the first cohort of students in the program will be current computer science students who have already demonstrated an interest in this specialty. They anticipate that 75 students will be enrolled once the degree is fully implemented.

The degree draws from existing faculty and curricular strengths in linguistic structure, modeling, discourse processing, and the application of linguistics in real world situations. The core is largely comprised of existing courses. Only four new linguistics courses (three in the core and one selective) were created for the program, and may also be completed by students in the Minor in Linguistics. Current faculty in Computer Science and Linguistics are adequate to support the program. In addition, linguists from among the faculty in the Department of Hispanic and Italian Studies will teach courses in

the program. Facilities and library resources are sufficient to support the program. The College of Liberal Arts and Sciences will provide additional resources if needed.

The Board action recommended in this item complies in all material respect with applicable State and federal laws, University of Illinois *Statutes, The General Rules Concerning University Organization and Procedure*, and Board of Trustees policies and directives.

The Executive Vice President and Vice President for Academic Affairs concurs with this recommendation. The University Senates Conference has indicated that no further Senate jurisdiction is involved.

The President of the University recommends approval. This action is subject to further review and approval by the Illinois Board of Higher Education.