

Board Meeting
May 16, 2019

ESTABLISH THE BACHELOR OF SCIENCE IN LIBERAL ARTS AND SCIENCES
IN BRAIN AND COGNITIVE SCIENCE, COLLEGE OF LIBERAL ARTS AND
SCIENCES, URBANA

Action: Establish the Bachelor of Science in Liberal Arts and Sciences in Brain and Cognitive Science, College of Liberal Arts and Sciences

Funding: No New Funding Required

The Chancellor, University of Illinois at Urbana-Champaign, and Vice President, University of Illinois with the advice of the Urbana-Champaign Senate recommends approval of a proposal from the College of Liberal Arts and Sciences to establish the Bachelor of Science in Liberal Arts and Sciences (BSLAS) in Brain and Cognitive Science.

With the exponential growth of the internet, “big data,” smart devices, robotics, and other computing technology, the study of how humans interact with, process, and understand information is increasingly important. The proposed BSLAS in Brain and Cognitive Science combines the study of psychology, neuroscience, computer science, philosophy, linguistics, and related fields to allow students to gain novel but integrated perspectives on information and intelligence, both biological and artificial. This interdisciplinary program will prepare students for careers in areas such as

intelligent information processing, artificial intelligence, telecommunications, and robotics.

The BSLAS in Brain and Cognitive Science will include many psychology courses, but differs from the existing BSLAS in Psychology as its emphasis is on machine learning, artificial intelligence, and computer programming. It will address student interest in educational domains that are currently relatively untapped or underdeveloped at the undergraduate level in the College of Liberal Arts and Sciences, such as neuroscience, computational approaches to behavioral data, and neurotechnology.

A critical component of the proposed program are courses in computer programming. The programming and mathematics skills required of existing majors in Computer Science and the “CS + X” disciplines, will be less extensive for the proposed program. The Brain and Cognitive Science curriculum will rely on the development of programming courses in languages such as Python, with two new tenure-track faculty in the Department of Psychology who have been hired in the areas of cognition and cognitive development to support this major.

The Board action recommended in this item complies in all material respects 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.