Board Meeting March 15, 2018

ESTABLISH THE BACHELOR OF SCIENCE IN LIBERAL ARTS AND SCIENCES IN COMPUTER SCIENCE AND GEOGRAPHY AND GEOGRAPHIC INFORMATION SCIENCE, COLLEGE OF LIBERAL ARTS AND SCIENCES, URBANA

Action: Establish the Bachelor of Science in Liberal Arts and Sciences in Computer

Science and Geography and Geographic Information 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 in Computer Science and Geography and Geographic Information Science.

The "CS +X" model originally included four College of Liberal Arts and Sciences (LAS) majors: Anthropology, Astronomy, Chemistry, and Linguistics. This model was approved by the Board of Trustees on May 31, 2012, and by the Illinois Board of Higher Education on February 5, 2013. The current proposal builds on the model, adding the major in Geography and Geographic Information Science (Geography and GIS) to the list of LAS disciplines to pair with Computer Science.

According to the U.S. Department of Labor, geospatial technology is a high-growth industry, with occupations in this discipline projected to grow at a rate more than three times those of all other occupations over the next ten years. With the emergence of big data, the development and application of computational algorithms or methods in geography has become increasingly important to the discipline. The major in Computer Science and Geography and Geographic Information Systems provides an integrated way for students to learn about location-aware devices, geospatial technologies, and to understand and mine the large amounts of data these technologies and devices generate. Graduates can work as programmers, analysts, and researchers in roles varying from developing geographic information software and analytic techniques to solving spatial problems related to healthcare, transportation, national security, environmental degradation, natural hazards, and more.

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.