Board Meeting May 20, 2021

ESTABLISH THE MASTER OF SCIENCE IN ENVIRONMENTAL GEOLOGY, COLLEGE OF LIBERAL ARTS AND SCIENCES AND THE GRADUATE COLLEGE, URBANA

Action: Establish the Master of Science in Environmental Geology, College of

Liberal Arts and Sciences and the Graduate College

Funding: The program's start-up costs are covered by the campus' Investment for

Growth grant. At steady state, any ongoing costs will be covered by tuition

revenue.

The Chancellor, University of Illinois Urbana-Champaign, and Vice President, University of Illinois System with the advice of the Urbana-Champaign Senate recommends approval of a proposal from the College of Liberal Arts and Sciences and the Graduate College to establish the Master of Science in Environmental Geology (M.S. in Environmental Geology).

The M.S. in Environmental Geology is an online, non-thesis program that will accommodate remotely-located learners and working professionals. It is designed to meet the high demand for advanced geology expertise used in applied industry sectors, including groundwater modeling and contaminant migration characterization, geophysics, and "big data" analysis. The proposed program's target audience is the environmental consulting sector, which is the most productive sector for geologists' employment and will remain a consistent area of employment for decades. Many bachelor's-level graduates who enter environment-related federal government jobs discover after a few

years employed in this sector that advanced skills and certification obtained through a master's in geology are required to migrate into project management and leadership positions. However, taking time out of industry to complete a graduate degree can be challenging, making online graduate studies such as the proposed program highly attractive.

Students will enroll in a minimum of two core courses focusing on geodata science and analysis. In addition to these core courses, students will select with aid of the program advisor coursework focusing on advanced subjects and case studies in areas such as principles of geographic information science, geocomputation, and data science.

The proposed program requires hiring of one full-time specialized faculty member, one administrative staff member, summer/overload salary for faculty to develop and offer online courses, teaching assistant support, and additional information technology support to administer online courses. These expenses are funded for the first three years through the University of Illinois Urbana-Champaign's Investment for Growth grant. Subsequently, it is expected that the program will be self-sustaining, supported by tuition revenue. No new or additional facilities, significant improvements to existing facilities, or additional resources from the University Library are needed.

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. The action is subject to further review by the Illinois Board of Higher Education but IBHE approval is not required.