

Approved by the Board of Trustees
May 20, 2021

Board Meeting
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ESTABLISH THE MASTER OF SCIENCE IN WEATHER AND CLIMATE RISK
AND ANALYTICS, COLLEGE OF LIBERAL ARTS AND SCIENCES AND THE
GRADUATE COLLEGE, URBANA

Action: Establish the Master of Science in Weather and Climate Risk and Analytics, College of Liberal Arts and Sciences and the Graduate College

Funding: Initial funding for a full-time, specialized faculty member in Atmospheric Sciences, a program coordinator, summer/overload salary for current faculty for course development, and additional teaching assistant and information technology support as needed will be from the campus' Investment for Growth grant for the first three years of the program. Subsequently, it is expected that the program will be self-sustaining, supported 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 Weather and Climate Risk and Analytics (M.S. in Weather and Climate Risk and Analytics).

Employment opportunities and the need for atmospheric scientists with skills in computational analysis/analytics of weather and climate data, expertise in predictive models for the weather-climate interface, and ability to assess weather-and climate-related risk are rapidly growing. The emphasis on weather and climate data analytics has emerged recently, meaning students who graduated with bachelor's degrees

and joined the workforce more than approximately five years ago would likely not have gained these skills as part of their undergraduate training. The M.S. in Weather and Climate Risk and Analytics is expected to appeal to these working professionals who want to advance their careers. This program is designed to be offered online, allowing flexibility for such working professionals. Graduates will be prepared for the most rapidly growing and lucrative opportunities in the atmospheric sciences.

This non-thesis, online degree is unique in that it will be focused specifically on weather and climate risk and analytics. Currently, no other institution in the world has this type of degree program. The program will give students a fundamental understanding of the core theoretical underpinnings of atmospheric sciences, teach them to formulate research problems and develop approaches towards solving those problems, develop and enhance ethically responsible and effective communication skills at a professional scientific level, and provide knowledge of the frontiers in atmospheric science research.

An additional specialized faculty member has been hired in the Department of Atmospheric Sciences to support this program, and a program coordinator will be hired. These hires are funded for the first three years through the University of Illinois Urbana-Champaign's Investment for Growth grant, along with summer/overload salary for current faculty for course development activities and any additional teaching assistants and information technology support. 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.