

MEMORANDUM

To: University Senate

From: Sue Sutherland, Chair, Council on Academic Affairs

Subject: Proposal to Establish a Quantum Graduate Interdisciplinary Ph.D. Degree Program

Date: January 23, 2026

A PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO ESTABLISH A GRADUATE INTERDISCIPLINARY Ph.D. PROGRAM (QuGIP), CENTER FOR QUANTUM INFORMATION SCIENCE AND ENGINEERING (QISE)

- Whereas the grand challenges in QISE research and the national need for a quantum workforce require a more interdisciplinary approach, and thus this program draws on faculty leaders from Physics, Chemistry, Mathematics, Electrical and Computer Engineering, Computer Science and Materials Sciences, and the program will be housed in the Center for Quantum Information Science and Engineering; and
- Whereas there will be a compact common core of QISE courses designed to accommodate variations in preparation from these disciplines and students will develop a common vernacular and teaming skills through the compact core, research rotations across disciplines, informal community building and industry engagement; skill-building in ethics, technical writing and communication will be integrated in both classroom and research activities; and
- Whereas the program is a minimum of 90 credit hours with at least 9 for foundational graduate coursework, 6 for seminar professional development courses, and 50 from experiential learning 34 credit hours with foundational courses (19 hours), general courses (12 hours), and an experiential learning capstone (3 hours). Curricula have been designed with evidence-based methods with support from the Drake Institute for Teaching and Learning; the development and launch of the program is heavily supported by an NSF grant; there are letters of strong support; and
- Whereas the proposal was reviewed by the Combined Graduate School/Council on Academic Affairs subcommittee, and was then approved by the full Council on Academic Affairs at its meeting on December 3, 2025.

Now therefore be it resolved that the University Senate approve the proposal to establish a Quantum Graduate Interdisciplinary Ph. D. program and respectfully submit the proposal to the Board of Trustees.