

Richard Koubek, President

Office Memo

2/22/21

Date

Office of the Provost and Phone: (906) 487-2440 Senior Vice President for Academic Affairs Fax: (906) 487-2935 TO: Jacqueline E. Huntoon, Provost & Senior Vice President for Academic Affairs Richard Koubek, President FROM: DATE: February 19, 2021 SUBJECT: Senate Proposal 23-21 Attached is Senate proposal 23-21, "Proposal to Change Degree Title from 'Cheminformatics' to 'Computational Chemistry and Chemical Informatics," and a memo stating the Senate passed this proposal at their February 17, 2021 meeting. I have reviewed this memo and recommend approving the proposal. I concur do not concur_____ with this recommendation. Jell



University Senate

DATE: February 18, 2021

TO: Richard Koubek, President

FROM: Samuel Sweitz

University Senate President

SUBJECT: Proposal 23-21

COPIES: Jacqueline E. Huntoon, Provost & Senior VP for Academic Affairs

At its meeting on February 17, 2021, the University Senate approved Proposal 23-21, "Proposal to Change Degree Title from 'Cheminformatics' to 'Computational Chemistry and Chemical Informatics'". Feel free to contact me if you have any questions.

The University Senate of Michigan Technological University Proposal 23-21

(Voting Units: Academic)

Proposal to Change Degree Title from "Cheminformatics" to "Computational Chemistry and Chemical Informatics"

January 9, 2021

Department of Chemistry

Contact: Lanrong Bi, e-mail: lanrong@mtu.edu

- 1.General description and characteristics: This proposal is to change the title of the "Cheminformatics" B.S. degree program to "Computational Chemistry and Chemical Informatics."
- 2. Proposed new title: "Computational Chemistry and Chemical Informatics"
- 3. Rationale: There are two key rationales for the title change. First, the new name more accurately captures the breadth and balance of faculty expertise, course offerings, and research opportunities for undergraduates in the department by explicitly identifying computational chemistry as well as chemical informatics as core areas of learning for this major. Over the last few years the department has added several new faculty who have a strong focus on computational chemistry, while they and other faculty also have expertise in chemical informatics.

Second, the proposed title is expected to be more recognizable and appealing to students interested in a range of fields, including computer science and data science. With the creation of the new College of Computing and related Tech Forward initiative Data Revolution and Sensing, we hope to attract new students to this major, for which our department has capacity in which to grow. Students majoring in this degree program need only one additional course to satisfy the requirements of a computer science minor. A new introductory course in Computational Chemistry and Chemical Informatics has been added to the curriculum as a welcoming introduction to a broader student population. We note, in addition, that Chemical Informatics is a more modern name instead of the dated, and often less familiar name, Cheminformatics.

Chemical Informatics is used by universities:

Indiana University has a certificate program in Chemical Informatics https://www.indiana.edu/academics/degrees-majors/degree/chemical-informatics-crt-iu-bloomington-chemingcrt

also

the leading journal of the American Chemical Society in the subject is named Journal of Chemical Information and Modeling https://pubs.acs.org/journal/jcisd8, and by research groups e.g. https://glaros.dtc.umn.edu/gkhome/project/cheminfo/overview and https://www.nist.gov/mml/csd/chemical-informatics-group.

All current students will complete the program with the current name, but no new students will be enrolled in the current degree name once the new name has begun.

4. Related programs: Illinois Tech has BSc in Computational Chemistry and Biochemistry https://www.iit.edu/academics/programs/computational-chemistry-and-biochemistry-bs

UC Berkeley has concentration Computational Chemistry https://chemistry.berkeley.edu/ugrad/degrees/chem/computational-chemistry

Heriot-Watt University in the UK has BSc in Computational Chemistry https://www.hw.ac.uk/uk/study/undergraduate/chemistry-bsc.htm

Bristol University in the UK has BSc in Chemistry and Scientific Computing https://www.bristol.ac.uk/study/undergraduate/2021/chemistry-with-scientific-computing/

Loughborough University has BSc in Chemistry with Computing https://www.lboro.ac.uk/study/undergraduate/courses/a-z/chemistry-with-computing-bsc/

- 5. Projection of number of students NA
- 6. Curriculum design NA
- 7. New course description NA
- 8. Model schedule NA
- 9. Library and learning resources NA
- 10. Equipment NA
- 11.Program costs NA
- 12. Accreditation requirements. No additional accreditation requirements.
- 13. Planned implementation. Fall 2021

Approved by Dept. of Chemistry faculty: Approved by CSA Dean: Approved by Dean's Council: Approved by the University Senate: Approved by Provost:

Proposal 23-21 February 3, 2021