

Memorandum

To: Faculty Senate

Seton Hall University

From: Katia Passerini, Ph.D.

Katia Parsecui

Provost and Executive Vice President

Re: 3+2 Physics and Data Science

2022-FS-39

Date: March 1, 2022

We have received 2022-FS-39, 3+2 Physics and Data Science, which communicates that the Faculty Senate voted to approve a 3+2 Dual Degree Program for a B.S./B.A. in Physics with an M.S. in Data Science at its February 18, 2022 meeting.

This proposed 3+2 accelerated dual-degree program pairs either the B.S. or B.A in Physics with the M.S. in Data Science. The programs could serve Physics students who are well-prepared to pursue an advanced degree in Data Science. We anticipate the program will attract both current Physics students and incoming students. External and internal market assessment indicate graduates will be well-positioned for internships and full-time employment for data science functions in private industry. Our undergraduate Physics major and the new M.S. in Data Science program can admit additional students before reaching full capacity. The dual-degree program will be evaluated according to the established protocols, and statistics will be compiled about the dual-degree students and their academic success.

This program was supported by the Dean of the College of Arts and Science and her predecessor, the Chairperson of the Department of Physics, the Chairperson of the Department of Mathematics and Computer Science, and the Dean of University Libraries. It went through the appropriate processes including approval by both affected Departments, the College Educational Policy Committee (EPC), the College, and the Academic Policy Committee (APC).

According to Dean Frierson, this program is both well-suited to students with a rigorous background in mathematics and "also provides a valuable credential in one of the most rapidly growing fields in the world." Admission to the program comes by way of an application submitted in the Spring semester of the junior year, and there are clear standards for continuing in the program both as an undergraduate and as a graduate student. The program proposers should share these standards and the program description, and the new designation should be entered into Banner by April 1, 2022.

I approve this 3+2 in Physics and Data Science. My approval is conditioned upon successful maintenance of both the program in Physics and the M.S. in Data Science, and this program will automatically sunset if either of those programs is closed or suspended. (As the Senate is aware, the M.S. in Data Science is presently subject to a sunset clause of its own.) In addition, this program may automatically sunset if, at the end of FY 2026, there are no students enrolled in the program. Of course, all new program proposals are subject to approval by the Board of Regents.

We thank the College of Arts and Sciences and the Department of Physics and the Department of Mathematics and Computer Science for their work on creating this efficient new program to serve students. We encourage other programs to imagine cross-disciplinary dual-degrees that create affordable pathways for students to increase their knowledge, versatility, and distinction. We look forward to hearing about the success of these students.