Date: March 3, 2023

TO: Henry Africk

FROM: Curriculum Subcommittee - Peter Parides, Lin Zhou, and Lili Ma (Chair)

RE: Curriculum Subcommittee Discussion Items for Proposal **22-04: New Academic Minor in Computer Science**

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**Proposal Overview:**

The proposal is to create a new minor in Computer Science using existing courses. This program will allow students throughout the college to add the designation “Minor in Computer Science” to their transcript.

**Proposal Rationale:**

The mathematics department currently offers an associate in science degree in computer science. Many of the students in this program would like to continue studying computer science at a bachelor’s degree level. Fortunately, the mathematics and other departments already offer a variety of advance courses related to computer science. The required sequence of courses in the proposed minor will provide an adequate preparation for computer science courses at the advanced undergraduate or graduate level. It is designed to provide a fundamental understanding of the key concepts of the theory of computing and will offer students options for careers where knowledge of computers is required. Several other CUNY campuses have already offered a CS minor, including Baruch College, Brooklyn College, City College, College of Staten Island, Hunter College, Lehman College, and Queens College.

**Strengths:**

* The proposed new minor in Computer Science reflects institution’s actions in response to students’ **needs**. It provides a five-course sequence, aiming to prepare students with fundamental understanding of the theory of computing.
* The proposal carefully studies **a wide range of programs** in our institution, presenting curriculum maps for students in Biomedical Informatics (BS), Applied Computational Physics (BS), Computer Systems (BTech), Data Analytics in Economics (BS), and Data Science (BS), to name but a few.
* The proposed minor consists of **three required** courses and **two elective** courses. The course decomposition ensures that theory of computation will be emphasized (in the three required courses), as well as utilizing existing computer programming courses from other departments.

**Weaknesses:**

None

**Comments from the Subcommittee and the Provost’s Office (Resolved by the Proposer):**

1. The provost’s office confirmed that the format of the proposal is up-to-date.
2. The provost’s office suggested the description of the proposed minor to be more student-centered. The proposer took the suggestion and modified the description accordingly.
3. The dean suggested the proposer to consider two more courses as potential candidates for the elective courses. The proposer reviewed the sample syllabi of these two courses and added them into the list of elective courses.
4. During the meeting with the provost’s office, there were discussions about whether or not to keep the higher-level Math courses in the list of elective courses. The decision is to keep them to reduce the amount of paper work for course substitution or approval.
5. During the review process, the subcommittee raised five questions, regarding a) the format of the Chancellor’s Report, b) the required number of credits, c) the expected employment opportunities, d) the design of course sequence, and e) reaching to more departments for support. The proposer adequately addressed all these questions.

**Subcommittee Activities:**

1. 09/29/2022: The subcommittee received the assignment.
2. 10/13/2022: The subcommittee provided comments to the proposer.
3. 12/01/2022: Proposer submitted response.
4. 02/05/2023: The subcommittee provided comments to the proposer.
5. 02/12/2023: Proposer submitted response.
6. 02/13/2023: The subcommittee scheduled the meeting with the provost’s office.
7. 03/01/2023: Meeting with the Provost’s office.
8. 03/02/2023: Proposer submitted the final version of the proposal.
9. 03/03/2023: The subcommittee chair submitted the final report.