DATE: March 5th, 2023

TO: Prof. Anne Marie Sowder, Chair

College Council Curriculum Committee

FROM: Curriculum Subcommittee

Darya Krym, Khalid Lachheb, Chen Xu (subcommittee chair)

SUBJECT: Final Report for curriculum proposal 22-02, Emerging Media Technology B.Tech

Program Modification, Phase One

PROPOSAL OVERVIEW:

The Emerging Media Technology program proposed these major curriculum changes based on their tenyear program study. The changes include:

- 1) Specify consistent MAT and PHYS liberal arts requirements for all four concentrations under the MTEC program;
- 2) Propose a new course, MTEC 1201, Computer Programming for Interactive Media I;
- 3) Propose a new course, MTEC 1202, Computer Programming for Interactive Media II;
- 4) Propose a new course, MTEC 3501, Culmination Project Development;
- 5) Propose a new course, MTEC 4502, Career and Portfolio Seminar;
- 6) Change the prerequisites of the existing ten courses based on the newly proposed courses;
- 7) Withdraw two courses, MTEC 1003 "Media Computation Skills Lab" and MTEC 2230 "Media Computation," which are replaced by the new courses.

RATIONALE:

This proposal in the Emerging Media Technology program is focused on enhancing students' quantitative skills and professional development, and streamlining the courses within the department. The Emerging Media Technology program has four concentrations: "Media Computation," "Physical Computing," "Game Design and Interactive Media," and "Music Technology." Currently, math and science requirements differ across concentrations. As a result, some students with low math requirements often struggle with quantitative material in advanced courses. Unifying math and science requirements across concentrations can help students adjust to advanced classes. Currently, students in MTEC need to take introductory programming courses from the CST department. Two new programming courses, MTEC 1201 and MTEC 1202, were proposed to target the tools and languages applied in the media industry. A good portfolio is critical for the career development of MTEC students. Two new courses, MTEC 3501 and MTEC 4502, are designed to connect the existing design courses, identify and package elements from completed projects, and build an online portfolio framework.

PROPOSAL STRENGTH:

This proposal reflects the MTEC program's effort to stay agile to keep up with constant changes in the media industry. Consistent math and science requirements across concentrations can clarify the confusion among students and prepare them for advanced courses. The new introductory courses will help students focus on programming languages in the media field and make any adjustments in the future. The new courses related to projects and portfolios will benefit students in their professional development. The modified curriculum removed the legacy courses and redeployed some selected required courses as electives. The new curriculum will strengthen the core courses of the MTEC program and provide students with more options in this interdisciplinary industry.

WEAKNESS: None

Concerns Addressed:

Some concerns were raised by subcommittee members and Provost's Office. These concerns were addressed by proposers:

- 1. Add a detailed rationale and improve the structure of the proposal.
- 2. Provide course map/degree map of each concentration to reflect the curriculum changes.
- 3. Include the communication with the CST department and Math department.
- 4. List MAT 2440 as a major requirement instead of a Scientific World requirement.
- 5. Include the College Diversity and Inclusion statement in all the course syllabi.

Subcommittee Activities:

The subcommittee communicated via email and suggested changes for the proposers in January 2023. After receiving the revised proposal, the subcommittee suggested further minor changes, which were incorporated by the proposers. On March 2nd, 2023, the subcommittee met with the proposers, Department Chair Prof. McCullough, Provost Pam Brown, Associate Provost Reginald Blake, Dean Gerarda Shields, and Kim Cardascia. Some modifications were recommended and incorporated into the final document.