

Office of the Provost

University of Maryland, Baltimore County 1000 Hilltop Circle Baltimore, Maryland 21250

November 1, 2018

Dr. James D. Fielder, Jr.
Secretary
Maryland Higher Education Commission
6 N. Liberty Street, 10<sup>th</sup> floor
Baltimore, MD 21201

Dear Dr. Fielder,

I am writing in response to the proposal from Stevenson University to offer a new academic program, Bachelor of Science in Biomedical Engineering. UMBC would like to offer an objection to the creation of this new program at Stevenson University on the grounds listed below.

UMBC offers a BS degree in Chemical Engineering where students are given the choice of three different tracks: (i) Traditional Chemical Engineering, (ii) Environmental Engineering and Sustainability, and (iii) Biotechnology and Bioengineering. Our Biotechnology and Bioengineering track includes several classes related to biomedical engineering, and we have a number of biomedical engineering focused faculty in our Chemical, Biochemical and Environmental Engineering department. Creation of the Stevenson University program will draw students away from our program and thus will be detrimental to UMBC's program.

In this regard, we note that the existence of UMBC's well-established program was not recognized in the proposal. It was not included in the list of similar programs in the State and/or same geographical area prepared by Stevenson University. Specifically, in Table 2 (p. 6 of the proposal) under the heading "CIP Code 140701 Chemical Engineering" only our MS and PhD programs are mentioned, while our BS program is not. This suggests that the data and projections regarding demand and capacity for this new program are incorrect and ignore the potential impact of the proposed program on UMBC.

We also note that most of the faculty supporting and teaching in UMBC's program are trained as engineers, consistent with its designation as an engineering program and accreditation requirements. In contrast, the program proposal from Stevenson University appears to suggest that only one faculty member involved (i.e., the future Director) will be trained as an engineer and all other faculty explicitly mentioned in the proposal (Table 6, p. 21) are scientists or mathematicians, not engineers. We believe it would be a disservice to prospective students to offer an engineering degree program that is taught by faculty who are not trained as engineers when UMBC's program, appropriately, offers students the opportunity to be guided and taught by faculty that are professionally qualified in the field of engineering. Thus, we would argue that the program, as proposed, is much more of a biomedical science program than it is an engineering program.

Finally, we note that the proposed plans for accreditation are lacking. As an engineering department, UMBC's program benefits from the standards and rigorous process of continuous improvement required by ABET (<a href="http://www.abet.org">http://www.abet.org</a>). We note from our extensive experience with ABET accreditation that

the lack of trained engineers on the faculty would likely be considered a serious "weakness" during any application or review for ABET accreditation.

We believe, given the above considerations that the Stevenson University program proposal fails to recognize the existence of UMBC's engineering program and fails to meet the standards that are required in order to be designated as an engineering program.

Thank you very much for the opportunity to provide these comments on the Stevenson University proposal.

Sincerely,

Philip Rous

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Provost and Senior Vice President for Academic Affairs

cc: Dr. Antonio Moreira, Vice Provost for Academic Affairs, UMBC

Dr. Emily Dow, Assistant Secretary for Academic Affairs, MHEC