UMBC

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Date: August 17, 2018

To: Antonio R. Moreira, Vice Provost

From: Keith J. Bowman, Dean, College of Engineering and Information Technology

Cc: Aryya Gangopadhyay, IS Chair
             Helena Mentis, Associate Dean

Subject: Dean's Draft Response to Final Report on the Department of Information Systems
             Academic Program Review

The overall feedback received from the reviewers is very useful input even if it does not detail feedback related to the health and well-being of all academic programs in the department of Information Systems. As this was my first end-to-end experience associated with a UMBC Academic Program Review, I wanted to express concern that I was surprised that we use effectively the same process for an academic department that we use for an individual degree program such as a stand-alone professional Master's degree. As one of the larger UMBC departments that also offers seven different degrees it would seem that some aspects of the programs received only modest attention in the review.

a) UMBC should address the growing faculty workload imbalance -- indicated mainly by the increasing student-to-faculty ratio -- through the allocation of additional tenure-track lines to the department;

An increase in student enrollment, including enrollment of transfer students taking primarily upper division courses, has been a major aspect of transition for UMBC across the past five years as shown in Figure 1. For computing, information and engineering fields the last six to seven years have seen a stunning increase in students nationally of up to 100%. This and increased prominence for computing and information research themes has led to a strong national trend of faculty hiring to respond to student demand. Computing and Information Systems programs across the United States have enacted significant efforts at retention of current faculty and recruitment of new faculty. By January 2019, COEIT will have lost nine full time faculty due to recruitment by other institutions or retirement in the past two years, with four of those losses in IS. The cost of faculty startup and the strong competitiveness of the topic areas make maintaining our current faculty numbers difficult and addition of new faculty hire quite daunting. COEIT will be making a major effort to retain the high-quality faculty we have and to make the

case for additional positions. Without an increase in faculty positions for the campus or a redistribution of available positions, faculty growth responsive to student demand will be challenging. We will endeavor to bring IS back to at least its recent faculty size across the next two years.
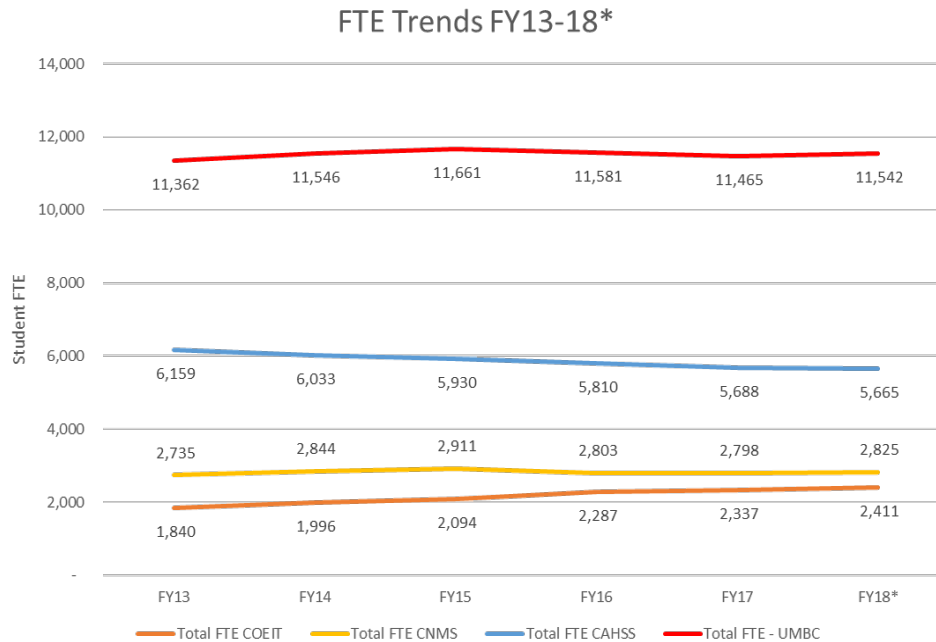

FTE Trends FY13-18*

	FY13	FY14	FY15	FY16	FY17	FY18*
Total FTE - UMBC	11,362	11,546	11,661	11,581	11,465	11,542
Total FTE CAHSS	6,159	6,033	5,930	5,810	5,688	5,665
Total FTE CNMS	2,735	2,844	2,911	2,803	2,798	2,825
Total FTE COEIT	1,840	1,996	2,094	2,287	2,337	2,411

Figure 1 Full-time equivalent (FTE) enrollment of students by college. Since FY13, COEIT has increased in student FTE by ~31% while FTE for CAHSS has decreased by ~8% and FTE for CNMS has remained fairly constant (Data from rex.umbc.edu).

b) UMBC should address the paucity of senior faculty leadership -- and consequent deficits in terms of mentoring for junior and mid-career faculty -- by offering mentoring support in the form of programmatic assistance (e.g., leadership training), hiring more full professors, and accelerating the promotion of long-time associate professors to the rank of full professor;

This is a very important and critical consideration. COEIT is already planning to provide a comprehensive approach towards supporting faculty in all programs to be successful across the entirety of their career. Although the college, in collaboration with other units on campus, has developed significant assets in supporting early career faculty, the college has not intentionally created support mechanisms for faculty across the entirety of their careers. In 2017-2018, COEIT introduced programs on equipment renewal and proposal writing support for faculty at all levels. Reorganization of the COEIT Dean's office has also included recruiting of two mid-career IS faculty in leadership roles as associate dean and director of the Center for Women in Technology. IS will be conducting a national search to hire a new senior leader who will succeed Dr. Aryya Gangopadhyay after the completion of his term in August 2019. Several tenure-track

and teaching faculty searches for IS will be planned across the next two years, including searches that will be open to faculty candidates from all levels.

c) UMBC should address deficiencies in the quality and consistency of instruction, particularly in the Health Information Technology degree program, by reducing dependence on adjunct faculty and hiring more permanent faculty (e.g., lecturers);

Development of a strong Health IT degree program requires a balanced approach involving expertise from practitioners and academic experts. One asset of COEIT's instructional mix is the inclusion of individuals with practical experience in Health IT. General challenges described above with retaining and hiring faculty will also impact this program, but retooling through hiring at least one or two lecturers will be put forward in the next two years.

d) UMBC should address outdated lab furnishings and equipment by replacing obsolete computers and installing new chairs and tables -- particularly in the public labs that are used heavily by undergraduates;

The IS budget for the coming and subsequent years will include a fund for replacement and renewal of computers and furnishings. Before a commitment on purchases will be made during FY19, discussions on how best to revise and renew IS spaces for support of students will take place. This will be expected to conclude by the end of fall semester 2018 leading to upgrades in place by Fall, 2019. COEIT has already made a commitment to increase the number of benches providing seating spaces in the hallways of ITE and recently refurnished common areas on the third floor of ITE. The 4th floor, where IS is principally located, is next in planning for the college.

e) UMBC should further consider the question of creating an independent School of Information or College of Computing in the context of its growth strategy for the campus and the College of Engineering and Information Technology.

As the APR Visitors indicated in the detail of their report, the financial model currently in place for UMBC is not revenue-based wherein the creation of a School of Information might make most sense. And, many of the institutions wherein a School of Information or College of Computing have been created have overall engineering and computing enrollments much larger than UMBC's. Also, UMBC's limitations barring creation of undergraduate degree programs in civil engineering and electrical engineering are persistent obstacles towards otherwise assembling a much more comprehensive engineering college that might otherwise advance the case for bifurcation.