Departmental BPC Plan
Department of Information Systems (IS)
University of Maryland, Baltimore County

Effective dates of Plan:12/19/2022- 12/19/2024
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1. Context

UMBC is a Minority Serving Institution with almost 14,000 students, of whom 52% are from racial/ethnic minority groups: 19% African American; 20% Asian American; 8.1% Hispanic; and 4.9% Other. Of the total student body, 46% identify as women and 54% identify as men. Undergraduate students account for 79%, 10% of whom are pursuing degrees in the IS Department. Each year an average of 166 (out of 1359=12.21%) undergraduate students transfer into IS from 2-year institutions, community colleges and other units on campus. Of the 21% graduate students at UMBC, 12% are pursuing one of the degrees offered in IS. The IS Department offers nine (9) degree programs: 2 undergraduate (IS & Business Technology Administration); 3 MS (IS online, IS on campus, Human-Centered Computing (HCC)); 2 Masters of Professional Studies in collaboration with our colleagues in the Office of Professional Programs (Health Information Technology & Software Engineering); 2 PhD (IS & HCC).

2. Goals

Outreach and recruiting: Our approach is a holistic approach aligned with the IS department vision of inclusive excellence across all underrepresented groups in context of the programs being evaluated. In this plan, we specifically focus on students from historically underrepresented groups in computing.

G1: Increase enrollment of women, African-American, Hispanic undergraduate transfer students from 2- and 4-year institutions to IS from the 5-year average of 51% to an average of 55% by 2032.

G2: Increase enrollment of women, African-American, Hispanic students in graduate programs from the 5-year average of 16% to an average of 19% by 2032.

Monitoring BPC Data

G3: Beginning in 2023 and concluding by 2026, we will analyze data from the last 6 years (using 2018 data as a baseline) to identify undergraduate success in the program, which will include (1) rates for earning a D, F, or withdrawing from a pre-gateway course, (2) attrition rates after pre-gateway courses, and (3) attrition after gateway courses.

G4: By 2026, we will analyze IS departmental data from the last 6 years to identify research opportunities and funding provided to African-American and Hispanic students at all levels: K-12, undergraduate students and graduate students.

G5: By Fall 2023, we will convene an IS departmental BPC committee with actionable commitment from the department to develop, organize, and monitor BPC activities, both short- and long-term. One PhD student will be included on the committee.

3. Activities and Measurement

Data collected for all activities will be disaggregated by race/ethnicity and gender, as possible.
A1a (G1): [led by Richard Sponaugle, William Ryan, Dwayne Butcher, Patricia Ordóñez] Continue departmental outreach activities for women, African-American and Hispanic undergraduate transfer students to increase enrollment, including NSF's STARS Computing

Corps, participation in university outreach events, and the Computing & Engineering Transfer Institute (https://coeit.umbc.edu/ceti/).

A1b (G1): [led by Carolyn Seaman] Implement NCWIT's pipeline-in-a-box to facilitate women, African-American, and Hispanic community college transfer students.

A1c (G1): [led by Carolyn Seaman and Andrea Kleinsmith] Develop a peer-mentoring program for incoming women, African-American, and Hispanic transfer students.

Measurement for G1 activities: Departmental student enrollment statistics monitored annually.

A2a (G2): [led by Jianwu Wang, Nirmalya Roy, Vandana Janeja] Continue hosting REU students and Data science scholars from groups underrepresented in computing through the NSF REU Site, NSF IUSE, NSF SATC, NSF iHARP and other relevant grants.

A2b (G2): [led by Sreedevi Sampath and Andrea Kleinsmith] Develop and disseminate talking points to faculty and staff for use during discussions with potential graduate students.

A2c (G2): [led by Vandana Janeja] Fund travel for faculty and student representatives to diversity focused conferences each year, such as National Society for Black Engineers (NSBE), Grace Hopper, Tapia.

A2d (G2): [led by Vandana Janeja] Continue to partner with undergraduate scholarship programs for students underrepresented in computing, such as Louis Stokes Alliance for Minority Participation (LSAMP).

Measurement for G2 activities: Departmental student enrollment statistics; participation counts; attendance counts.

A3a (G3): [led by Karuna Joshi and Andrea Kleinsmith] Work with UMBC's Institutional Research, Analysis & Decision Support (IRADS) to retrieve quantitative data regarding departmental student enrollment statistics.

A3b (G3): [led by Patricia Ordóñez, Jennifer Carter, Zehra Zaidi, and William Ryan] Work with faculty who are currently teaching or who have taught the pre-gateway and gateway courses in the past two years to obtain qualitative data on their experiences.

A3c (G3): [led by Vandana Janeja] Administer the Data Buddies survey for students in other department courses including in the pre-gateway and gateway courses, identifying first year and transfer students separately.

Measurement for G3 activities: Course grades; quantitative and qualitative survey data.

A4a (G4): [led by Sanjay Purushotham] Develop a catalog detailing research opportunities provided to students by IS faculty.

A4b (G4): [led by Vandana Janeja] Work with IRADS to analyze data.

Measurement for G4 activities: Faculty and student demographics; qualitative data on students' experiences; amount of funding.

A5a (G5): [led by Vandana Janeja] Convene a departmental committee on BPC with members determined via faculty/staff nomination and voting, ensuring a diverse committee with respect to gender, racial/ethnic background, and rank.

A5b (G5): [led by Zhiyuan Chen and Tiffany Shorter] Develop and administer a climate survey to IS faculty and staff.

A5c (G5): [led by Program Directors with Office of Institutional Advancement and Dwayne Butcher] Develop and administer a survey to alumni.

Measurement for G5 activities: Survey data