Abbreviated Departmental BPC Plan
Computer Science and Engineering Division
University of Michigan - Ann Arbor

Effective Dates of Plan: 08/01/2023 - 08/01/2025

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Context

The Computer Science and Engineering (CSE) community comprises more than 400 graduate students enrolled in our Master's and Ph.D programs and 3000 undergraduate students. A commitment to increasing participation and inclusion is integral to CSE's values of **Cooperation** and **Service.** In particular, CSE's values include a commitment to promote inclusion and mutual respect, encourage diverse perspectives, and look after each other**,** while contributing to the well-being of our community and global society**.** As part of this mission, CSE strives to recruit, welcome, and continuously support students from underrepresented groups into this exciting discipline.

CSE's DEI Committee publicly releases an extensive Climate and Transparency Report on Juneteenth (June 19th) which details efforts across the division and contains statistics useful for communicating departmental context including: undergraduate and graduate demographic data, sentiment and climate responses from course and division-wide surveys, and demographic data relating to graduate and faculty recruitment.

BPC Goals, Activities, and Measurement

Goal 1: Annually provide BPC-focused programs and outreach efforts targeting high school students, particularly from the Detroit area.

A1a: AI4All Program (David Fouhey)**:** Two week residential camp in July for Detroit high schoolers (81.6% Black and 13.9% Hispanic/Latino) where students are introduced to coding and the field of AI via projects.

A1b: M-STEM Academies (Bill Arthur)**:** CSE Faculty provide a 3 week CS course for M-STEM Academies, a summer program with co-curricular activities to support students from URGs[1] as they transition from high school to the first two years of college. M-STEM Academies supports about 60 students per year.

A1c: Increasing outreach to high schools (Sarah Snay)**:** Identify and outreach to high schools with majority URG enrollment and invite them to existing or newly-created CSE programs.

M1: Annual Report (Wes Weimer and DEI Committee Members): Track participation in these and other similar programs and report participation numbers in Annual DEI Climate and Transparency Report.

Goal 2: Annually provide opportunities for women and students from URGs in CSE.

A2a: African Undergraduate Research Adventure (AURA) (Todd Austin and Valeria Bertacco): AURA program is a research exchange for undergraduate students at African institutions (currently the Addis Ababa Institute of Technology and the University of Rwanda) who come to CSE for 12 weeks during the summer to conduct guided research. Nearly 60% of these students have gone on to graduate programs at research universities in the US, which has improved the graduate-level representation of black students.

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[1] Underrepresented Racial/ethnic Groups: students who identify as American Indians, Alaska Natives, Blacks and African Americans, Hispanics and Latinos, persons with disabilities, Native Hawaiians, and Other Pacific Islanders.

A2b: Computing CARES (Valeria Bertacco and Amir Kamil): This program aims to broaden participation in computing, particularly for women, through increasing faculty adoption of inclusive teaching practices and incorporating inclusive teaching training for course staff.

A2c: Girls Encoded (Rada Mihalcea): This program is designed to address gender underrepresentation in computer science through providing outreach and mentorship to undergraduate women in computing.

A2d: Women in Computing Seminar (Rada Mihalcea): This seminar series brings distinguished women researchers to discuss their work and meet with faculty and students.

A2e: Increasing outreach to Minority Serving Institutions and Community Colleges (Sarah Snay)**:** Identify and outreach to MSIs and local Community Colleges (primarily Washtenaw Community College, which has 34% enrollment of students from URGs, majority black) to offer more opportunities for their students from URGs to engage with CSE faculty and staff before applying to a CS program.

A2f: LEAP Fellows Program (Wes Weimer and Chad Jenkins): As part of Cohort 2 of the LEAP Alliance, we will mentor a group of LEAP fellows to increase representation of Ph.D graduates from URGs and who identify as disabled.

A2g: CS KickStart (Rada Mihalcea): This program is a week-long introduction to computer science for UM women with little to no experience with computing.

A2h: Discover Computer Science (Rada Mihalcea): This two-credit course is designed for any student interested in exploring computer science but doesn't have formal programming experience and is particularly designed to support women and students from URGs.

A2i: Explore Computer Science Research (Rada Mihalcea): This program provides summer research opportunities to women and students from URGs.

A2j: Graduate Fellow Workshops (David Fouhey): The workshops provide application preparation to help women and students from URGs who are seeking fellowship funding.

M2: Participation The DEI Committee will track participation in these programs and report this information in the Annual DEI Climate and Transparency Report. Each program will be encouraged to keep records relating to participation and program outcomes.

M3 Retention: The Annual DEI Climate and Transparency Report reports retention statistics for both undergraduate and graduate students. For undergraduates, retention is measured based on self-reported demographics of students in core courses typically taken in Years 1 and 3 of the undergraduate program.

Goal 3: Dedicate a portion of annual DEI budget toward financially supporting students attending DEI-focused conferences.

A3a: Annually sponsor the Grace Hopper Celebration (Jasmin Stubblefield) and Richard Tapia Conference (Sarah Snay) and coordinate student registration and travel.

A3b: Annually reach out to local student organizations (Sarah Snay) to provide funding to attend SHPE and NSBE conferences.

M4: Funding and Participation Levels: The Annual DEI Climate and Transparency Report reports funding amounts and participation metrics for these programs.