# Departmental BPC Plan Department of Computer Science and Engineering The Ohio State University 

Effective dates of Plan: 07/05/2023-07/05/2025
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## 1. Context

The Ohio State University (OSU) is a public research university committed to providing high-quality educational services to all. With over 65,000 graduate and undergraduate students, OSU is one of the largest American universities. From 2018 to 2022, the total undergraduate enrollment in the Department of Computer Science and Engineering has steadily grown from 1,000 to 1,180 students. Figure 1 shows the distribution among students based on race/ethnicity and sex assigned at birth. At OSU, the historically underrepresented groups include four categories: Black or African American, Hispanic, American Indian/Alaskan Native (CSE has no students from this population), and those identified as Two or More Races, including at least one of the previous categories. Women students and students from historically underrepresented groups are underrepresented relative to their percentage of the student population in CSE at OSU. We can see that the percentage of Black or African American undergraduates has grown at a steady pace. In contrast, the percentage of women students has been flat over the years despite the overall growth.

Figure 1. Historically underrepresented groups and gender distribution by year (undergraduates


## 2. Goals

Our department embraces the opportunity to prepare each student for a promising career as a computer science professional, including students from historically underrepresented groups. We acknowledge that our department's culture can be greatly improved to yield a more diverse population.
G1: Retention rates will be uniform by 2025 across all demographic backgrounds for the process of transferring from pre-major to in-major status.


G2: Retention rates will be uniform by 2025 for all demographic groups for the process of transferring from in-major to graduation. We are especially focused on demographics that experience intersectional systemic bias.
G3: Over $30 \%$ of faculty and staff will lead or participate in BPC activities by 2025, especially activities targeting equity in retention rates and reducing marginalizing experiences.

## 3. Activities and Measurement

## A1. Data-Driven Climate Survey and Workforce Development (G1, G2)

A1a. Faculty can join the standing Diversity and Inclusion committee and will be rotated out after serving three years. We will increase the size of the committee. Measures: number of faculty; number of activities. Contact: Mike Bond, committee chair

A1b. Faculty can assist the two new staff members (to be hired by 2023 and 2025, respectively) to facilitate diversity and inclusion efforts, including data collection, affinity group mentoring, and leading cultural and policy changes. Measure: data analyzed. Contact: Mike Bond

A1c. Faculty will engage in climate surveys by overseeing their administration, working to increase the response rate, and reporting the results to the department. Two freely available climate surveys are the University of Washington's PACE and NCWIT's Student Experience of the Major. Measures: numbers collected and reported. Contact: Anish Arora, department chair

## A2: Retention (G1, G2)

A2a. Faculty will transform policies for admission and pre-major to major, e.g., via the Choose Ohio First Scholarship Program with a focus on improving students' experience and overall academic skills.
Measures: numbers of students mentored; improved equity and retention rate across gender, race, and ethnicity. Contact: Eric Fosler-Lussier

A2b. Faculty will serve as advisors for student affinity groups such as ACM-W, NSBE, SHPE, Women in Cybersecurity, and Society of Women in Engineering. Measures: number of CSE faculty advisors for these groups and meetings held/participated by faculty. Contact: Mike Bond

A2c. Faculty will study retention and pedagogy issues in our courses as a step forward to understanding and identifying inequities. Measures: materials added. Contact: Eric Fosler-Lussier

## A3: Research and Outreach Engagement (G2, G3)

A3a. Faculty will study means to improve BPC. Activities will seek to engage in strategies and methods to improve recruitment and retention of students through degrees and on-campus programs. Measures: number of proposals submitted to government agencies and local industry that include a task force to strengthen our department's research through BPC; number of scholarly outputs via BPC research activities. Contact: Mike Bond, Jian Chen

A3b. Faculty will engage in outreach and engagement activities at GHC, Tapia, OCWIC, and similar conferences to (1) broadcast their own research to wider audiences, (2) make connections for faculty recruiting, and (3) support students from underrepresented groups involved in research. Measures: number of faculty representatives at conferences. Contact: Mike Bond

A3c. Faculty will engage in BPC-focused outreach activities that enhance undergraduate education, e.g., via research. Examples include the exploreCSR workshop series and OHI/O events. Measures: number of faculties engaged in the activities and students' evaluation outcomes. Contacts: Anish Arora, Mike Bond, Christopher Stewart

## 4. Overall Climate and Measurements

Besides measurements from individual faculty activities, progress will be measured by tracking and synthesizing the following data: the number and demographics of students reached by BPC activities; the number and demographics of applications to and enrollments and retention in all degree programs; climate data collected from the CRA Data Buddies and Student Experience in Engaging Research Activities and Experience of the Major surveys; and faculty reporting of BPC-related outreach and research efforts during annual reviews.

