

Departmental BPC Plan
Computer Science and Engineering Department
Washington University in St. Louis



Effective dates of Plan: 10/19/2022- 10/19/2024

Contact: CSE Dept. Director of DEI Initiatives (“BPC Chair”), Steve Cole: svcole@wustl.edu

1. Context

Washington University in St. Louis (“WashU”) is a private, highly selective research university in the Greater St. Louis metropolitan area with an enrollment of 7,106 undergraduates and a similar number of graduate students in Fall 2020. Of the populations identified by the NSF as underrepresented in computing¹, WashU has significant undergraduate populations by gender of women students (approx. half in 2020), and by race/ethnicity of African American (“AA”) students (11%) and Hispanic students (11%). We collectively refer to these populations as our “BPC focal groups.”

We base our BPC plan on the following 3 considerations:

1. In our department, from 2010 to 2020 the percentage of students enrolled in a major who were women increased from 11% (20 of 183 students) to 27% (222 of 805 students)², and in 2020 women earned 26% (52/199) of degrees awarded in these majors at WashU vs. 19% (8,829/45,465) of degrees nationwide³.
2. During the same time interval, the percentage of students enrolled in a major who were Black/AA or Hispanic students increased from 9% (17 of 183 students) to 15% (122 of 805 students), and in 2020 Black/AA and Hispanic students earned 12% (24/199) of degrees awarded in these majors at WashU vs. 14% (6,587/45,465) of degrees nationwide.
3. In its Strategic Plan⁴, WashU emphasizes maximizing its positive impact on the St. Louis area. In the six K-12 school districts within 3 miles of WashU, the student population of 29,278 in 2020 included 49% women, 69% African American, and 5% Hispanic students⁵.

2. Goals

G1: Undergraduate CSE degree enrollment: Increase declared majors in our department who are women students to 32% and who are Black/AA or Hispanic students to 18% by 2025.

G2: Outreach to local area: Continue existing outreach to local K-12 students, of which a significant proportion are in our BPC focal groups. Collect any available data on department enrollment from area students by 2023 and generate plan by 2024 to increase enrollment.

¹ including women, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, and persons with disabilities

² Source (same for race/ethnicity data): internal WashU data

³ Source (same for race/ethnicity data): IPEDS (<https://cerp.shinyapps.io/IPEDS-computing-degrees/>)

⁴ <https://strategicplan.wustl.edu/>

⁵ Source: National Center for Education Statistics (<http://nces.ed.gov/ccd/elsi/>)

G3: Welcoming student climate: Increase percentage of undergraduates reporting overall program satisfaction on Data Buddies survey from 69% in 2021 to 75% by 2024, with proportionally-consistent increases among all measured student populations.

G4: Data gathering and assessment: Annually collect and analyze CSE pipeline data starting in 2023, seeking areas for improvement such as recruiting and retention of undergraduate students, especially those from our BPC focal groups.

G5: Data sharing and accessibility: Share relevant BPC data and opportunities among department faculty and other relevant stakeholders by 2023.

3. Activities and Measurement

A1 [G1]: Sponsor and support student groups [BPC Chair]: Provide mentorship for groups whose membership is significantly from our BPC focal groups, such as our Women in CS (WiCS) chapter and our Girls Who Code (GWC) chapter. Measurement: Student group membership counts and annual group review by BPC Chair.

A2 [G1]: Support for onboarding new CSE students [BPC Chair]: Co-sponsor events such as workshops at the beginning of the academic year focused on helping new CSE students, especially those from our BPC focal groups, build community within the department. Measurement: participant counts and surveys.

A3 [G1]: Sponsor attendance at conferences and events [BPC Chair]: Sponsor students from BPC focal groups to attend technical conferences and large events such as the Tapia Conference and Grace Hopper Celebration. Measurement: participant counts and surveys.

A4 [G4]: Create and implement department data collection/housing strategy [BPC Chair]: Work with relevant WashU offices to choose metrics for tracking recruiting and retention of CSE students, including those from our BPC focal groups. Establish procedures for annual collection and storage of relevant data by 2023. Measurement: annual verification of data collection.

A5 [G4]: Gather and analyze data to guide future priorities [BPC Chair]: Collect relevant data on undergraduate, graduate, and faculty experiences in the department, and adjust BPC goals and activities as necessary. Measurement: annual BPC Plan review.

A6 [G5]: Make BPC resources available to faculty [BPC Chair]: Create and maintain a repository that includes our department's BPC Plan and information about ongoing and planned BPC-focused activities, and share with all faculty and other relevant stakeholders. Measurement: annual review and update of repository.

A7 [G1, G2]: Extracurricular outreach [BPC Chair]: With collaborators, promote events (e.g. summer camps) and maintain outward-facing communication (e.g. social media) to attract students, particularly from our BPC focal groups, to computing and/or to our department. Measurement: participant counts, surveys, communication tracking.

A8 [G2]: Curricular outreach [BPC Chair]: Seek and identify opportunities for curricular outreach designed to broaden the appeal of computing to local students and community members through programs such as dual-degree partnerships, pathways from community colleges, and K-12 teaching modules. Measurement: participant counts of activities.

A9 [G3]: Improve climate [BPC Chair]: Catalog and review current procedures for promoting welcoming, supportive, inclusive interactions with the dept. for all students in areas such as classroom instruction, academic advising, and TA instruction from fellow students. Measurement: Annual review of student responses to CRA Data Buddies survey.