

Departmental BPC Plan
Department of Computer Science
University of Rochester



Effective dates of Plan: 03/24/2022- 03/24/2024

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1. Context

The University of Rochester is a R1 (Carnegie Classification) research university established in 1850. The Department of Computer Science at University of Rochester (UR) was established in 1974 as a PhD-only department. It is currently housed in the Hajim School of Engineering and Applied Sciences (HSEAS) and since 1995 has offered both Bachelor of Science (BS) and Bachelor of Art (BA) undergraduate degrees in computer science along with MS and PhD graduate degrees. The CS department is a charter member of the Building, Recruiting, and Inclusion for Diversity (BRAID) initiative with demonstrated commitment to increase participation of women and people from under-represented minorities (i.e., Native American, Alaska Native, Native Hawaiian, Pacific Islander, Black or African American, or Hispanic or Latino) in our undergraduate program. HSEAS is among the first to be recognized with a Bronze Level as part of the American Society of Engineering Education (ASEE) Diversity Recognition program and there is strong university and school support for diversity.

Approximately 587 undergrad, 35 masters, and 66 PhD students are enrolled in Fall 2021. In our PhD program with 70% international students, women constitute 10% of our student body, and Black or Multiracial students constitute 9%. Women are 22% of our MS students, and 94% of our MS students are international students. Women are 26% (on average: min 21%, max 33%) of our graduating class of undergrads 2015–2020. Native Americans, Alaskan Natives, Black or African American, and Hispanic or Latino students are 8.5% on average over the same period (min 5%, max 16%). This amounts to 5–11 students per class year (avg. 8), a percentage that has dropped as the proportion of international students has increased to nearly 50% of the graduating class. This number is very close to the Engineering school average and not expected to increase much over the classes of 2022 to 2024. The CS department has 18 tenure-track/tenured faculty, of whom 3 are women, and 4 teaching faculty, none of whom are women. No faculty identifies as from an under-represented minority.

2. Goals, Activities, and Measurement

G1: Discuss BPC activities once a year with faculty

A1: Collect and report student and faculty demographic information in a faculty meeting once a year in a privacy conscious manner. (Scott)

A2: Collate and report evaluations of activities undertaken in this BPC plan. (Scott)

A3: Discuss the findings of the CRA Data Buddies survey. (Scott)

G2: Measure and improve retention of women and students from under-represented minorities by 2024.

A4: Collect demographic data in our six core courses for the BS, including withdrawal rates by population. (Pai)

A5: Adopt BRAID-inspired principles to improve retention in our six core courses. We've already

implemented some of these in the introductory sequence. (Pai)

G3: Ensure majority of faculty are sensitized to gender bias to maintain an inclusive learning environment by 2024

A6: Have faculty participate in the same theatre-based training as TAs, collect statistics on participation rates, and evaluate effects using the CRA Data Buddies climate survey. (Scott)

G4: Each semester, faculty will participate in school-wide programs designed to attract undecided students from under-represented minorities to CS

A7: Faculty participate in activities organized by professional organizations such as NSBE and SHPE to attract students to CS. They also participate in the school-sponsored Early Connection Opportunity (ECO) program with the same goal. Measure faculty participation and trends in student demographics. (Pai)

G5: Each year, students and faculty will attend conferences that broaden participation

A8: Students and Faculty will attend Grace Hopper Celebration, the Richard Tapia Celebration of Diversity, and the annual conferences for NSBE and SHPE. Faculty will discuss attendee demographics and student event reports. (Zhupa)

A9: Encourage graduate students to attend the CRA-WP Grad Cohort for Women and the Grad cohort for IDEALS. (Zhupa)

G6: Hold annual events to increase awareness about the PhD pathway amongst women and under-represented minorities

A10: The CS department will hold events, including an annual faculty panel, to inform women and under-represented minorities in computing about the PhD pathway. We will track the number of students attending these sessions and track the number/demographics of undergraduate CS students going on to PhD programs. (Pai)

G7: Ensure 100% of faculty on recruiting committees are trained in unbiased recruiting practices by 2024

A11: Attend workshops organized by University on eliminating bias in recruiting (both Faculty and Graduate students). (Scott)

G8: Involve at least 15 students (10% of class size) from underrepresented minorities in undergraduate research/independent studies/honors thesis each year

A12: Leverage Rochester's Kearns Center activities to create a cohort and allow peer networking. Track the demographics of undergraduate students mentored, share study research experience survey. (Bai)

G9: Maintain faculty participation at 10% and increase graduate student participation to 10% in the Upward Bound summer program organized by Rochester's Kearns Center.

A13: At least 2 CS faculty and 2 CS graduate students will participate annually. The program targets first-generation and/or low-income students who are enrolled in the Rochester City School District, 89% of whom are under-represented minorities. (Bai)