Departmental BPC Plan Computer Science Purdue University



Effective dates of Plan: 11/09/2022- 11/09/2024

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1. Context

Purdue University is a public land-grant research university in West Lafayette, Indiana, and the flagship campus of the Purdue University system. As of spring 2022, approximately 42% of all Purdue undergraduates self-identify as women, and approximately 11% identify as persons from historically underrepresented racial and ethnic groups (URGs, this group includes American Indian or Alaska Native, Black or African American, Hispanic or Latino, or Native Hawaiian/Other Pacific Islander).

	Undergraduate Students		Graduate Students	
	Women	URGs	Women	URGs
Purdue CS	23%	5.5%	17.6%	1.8%
2021-2022				
National Average	20.9%	17.7%	23.4%	4.6%
(per Taulbee survey 2020)				

Purdue's Department of Computer Science has a student representation that is slightly above the national average for women at the undergraduate level but significantly below average for students from URGs. At the graduate level the representation of women and students from URGs in our student population is lower than the national average. Purdue CS is not directly involved in the undergraduate admissions process, but the department does handle graduate admissions.

2. Goals

G1: Each year, increase representation of people that identify as women and/or as a member of a URG in our undergraduate and graduate population by 1-2%, via, for example, scholarship and outreach activities.

G2: Each year, increase participation of high school students that identify as women and/or as a member of a URG in Purdue's Computer Science summer experiences for high-school students by 2-4%.

G3: By fall 2023, create and implement a training program for teaching assistants (both at the undergraduate and graduate level) focusing on diversity, equity, and inclusion (DEI). At least 75% of teaching assistants will be trained on DEI by the end of 2023.

G4: By fall 2023, create and implement a training program for faculty and staff to move them from awareness to allies in the creation of a more inclusive environment inside and outside of the classroom. At least 75% of faculty and staff will be trained on DEI by the end of 2023.

G5: By fall 2023, develop and implement a longitudinal data research project to annually gather and analyze data, such as undergraduate course enrollment and concentration demographic trends, to inform future representation goals.

3. Activities and Measurement

A1: Pipeline Program (G1) We will expand our participation in Purdue's College of Science Emerging Leaders Science Scholars (ELSS) program, which mentors Purdue students from URGs to help with their transition to college and decrease attrition. We will do this by the end of 2023. Measured by the number of ELSS participants and number of URM students staying in our CS program. Contact point: P. Drineas.

A2: Bridge Program (G1, G2) We will expand our Bridge Program for women and students from URGs. (i) We will work towards efficiently communicating the program to the relevant groups using personal communications (phone calls, online meetings, etc.) (ii) We will take steps to better understand mitigating circumstances that prevent participation in the program by the aforementioned groups. (iii) We will work towards securing additional funding for the program from within the department and the college. Expansion will be completed by the end of the BPC plan. Measured by the number of women and URM students participating in the program and the amount of additional funding secured for the program. Contact points: N. Li.

A3: K-12 Outreach (G1, G2) We will work with the College of Science to refill the vacant CS K-12 Outreach position. This outreach specialist would work on pathway initiatives to increase diversity within our undergraduate population, leveraging our MAGIC program. Measured by hiring a K-12 Outreach specialist and by a set of goals set by the specialist. We expect the program to be up and running by the end of Spring 2024. Contact point: R. Bond.

A4: Faculty and Staff Training (G4) Develop a program for faculty and staff to increase BPC awareness. (i) Increase participation of faculty and staff to workshops and Brightspace training modules offered by the Center for Intercultural Learning, Mentorship, Assessment and Research (CILMAR); (ii) organize BPC discussions at faculty meetings, coupled with visits and presentations from the Office of the Vice Provost for Diversity and Inclusion. Measured by the number of training sessions attended by faculty and staff; the number of BPC-related workshops and visits; and evaluated via survey questions as part of the data collection process in A7. The program will be active for the duration of this plan. Contact point: M. Shively and P. Drineas.

A5: TA Training (G3) We will work with both undergraduate and graduate students to: (i) Develop a training module for undergrad and grad TAs (UTA and GTA) to increase BPC awareness; (ii) We will seek student input via townhalls and surveys to identify areas of improvement in our UTA/GTA training. (iii) We will review the current UTA and GTA selection process to address inconsistencies regarding UTA/GTA skills with respect to BPC. Measured via the data collection process in A7 as well as the number of TA trained. To be finalized by the end of the BPC plan. Contact point: M. Shively.

A6: Awareness (G3, G4) Visually promote inclusion in CS: (i) A "CS is for everybody" permanent but changing display inside the lobby area in Lawson, featuring individuals from past and present day who are part of URGs. (ii) Stage formal/informal showings of material on the screens in the Lawson Commons, such as the film "Coded Bias" and "Picture a Scientist". Measured by the implementation of the above by the end of 2023. Contact point: E. Spafford.

A7: Data collection (G5) We will collect yearly data to understand and analyze undergraduate course enrollment and demographic trends to identify potential bottlenecks in increasing the representation of women and URMs in our student population as well as retention statistics. Measured by the survey design (in the 2022-2023 academic year) and its implementation (in the 2023-2024 academic year). Contact point: R. Bond.